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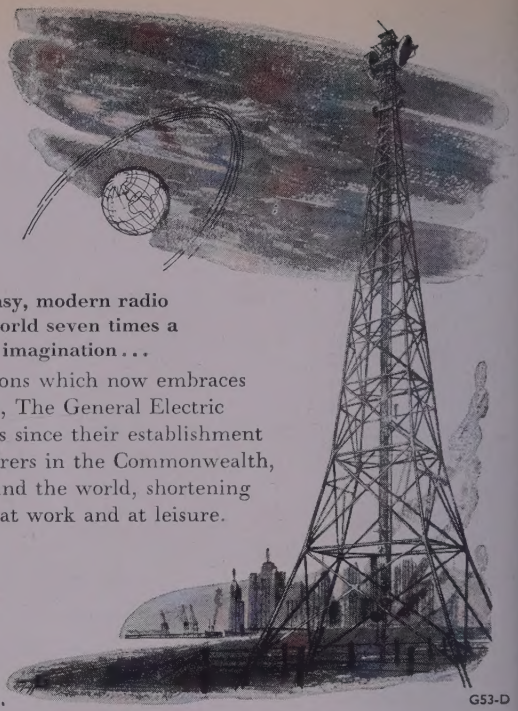

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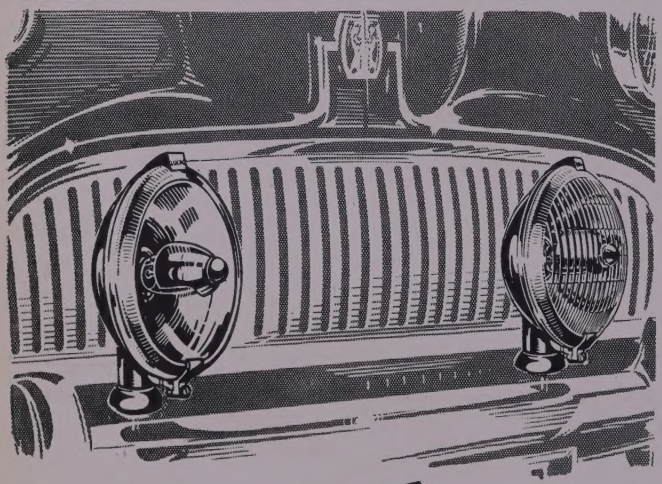

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Trebizond to Corsica:

the Story of an Imperial Migration

by DOROTHY CARRINGTON

All history has a background of geography; some history can only be revealed by following a geographical trail. The author has traced from Imperial Byzantium and from exile to exile the adventures of one of the great families of history, which, though thrust off the stage 500 years ago, has continued to act a noble part in the comparative obscurity of its adopted homes

The arms of the family of Stephanopoli de Comnène include the Byzantine double-headed eagle

I SPENT last Easter with the descendant of the Emperors of Byzantium and Trebizond. In his spacious library, hung with family portraits, he showed me the documents and chronicles whereby his lineage can be traced in direct unbroken succession to David, last of the Emperors of Trebizond, murdered in 1462 by the Sultan Mohammed II. Meanwhile, through the windows already shuttered against the Mediterranean sun, came the ringing of church-bells summoning the villagers to the services of the Greek rite. Between these ceremonies, accompanied by unfamiliar Oriental music, I pieced together the story of the imperial family of Comnenos, a story of fabulous escapes and adventures, of fortunes lost and won, of which the vital links were supplied to me by my host, Nicéphore, the present head of the family. This did not occur in Turkey, nor in Greece, nor anywhere in eastern Europe, but in Cargese, a pretty village on the west coast of Corsica. The story of how a Greek population comes to be living there, and how it was led into this exile by the descendants of the Emperors of Byzantium and Trebizond, is one of the strangest of the tangled bypaths of history.

The story begins in the 11th century, when the family of Komnenos, or Comnenos, powerful nobles of Paphlagonia, overthrew the Basilian dynasty and seized the throne of Byzantium. For over a hundred years this ambitious and dynamic family ruled the Eastern Empire. But in 1185 the Emperor Andronikos, who had come to the throne by murdering his predecessor and thereafter behaved with unbridled cruelty, was deposed and tortured to death in a popular revolution.

His son Manuel was spared, only to have his eyes put out by the new emperor, Isaac Angelos, and die in consequence. But his two children, Alexios and David, hidden by friends, succeeded in growing up in Constantinople, brooding on plans to restore their fortunes. Their chance came in 1204 when Constantinople was besieged by the Fourth Crusade. The two young men escaped to the coast of Colchis, where their aunt, Thamar, possessed power and wealth. With her help they raised an army, at the head of which Alexios rode in triumph into Trebizond, declaring himself to be the Grand-Komnenos and lawful sovereign of the Roman Empire. So was founded the obscure, improbable, but curiously resilient Empire of Trebizond.

Everything about it was improbable. Its creation was due to the audacity of a young man of whom nothing was known save that he was the grandson of a notorious fallen tyrant. Its survival for some two-and-a-half centuries, an island of Greek and Christian civilization, cut off from Europe by Mohammedan principalities, menaced by wave on wave of Asiatic conquerors, is more improbable still.

A Greek colony since early times, Trebizond

British Museum

A 16th-century view of Trebizond (after its conquest by the Turks) which shows its strong natural defensive situation, made stronger by the city walls constructed during the 250 years when the constantly menaced empire of the Comneni, an offshoot of that of Byzantium, had its centre there

supported a wealthy population of traders. The city, built on a plateau of trapezoidal shape, from which it derived its name of Trapezus, surrounded by deep ravines, was almost impregnable. It also stood at a junction of ancient caravan-routes, leading eastwards and southwards into Asia, westwards to Europe. When Alexios appeared its position had become critical. Already separated from Constantinople by the conquests of the Seljuk Turks, with the fall of the capital it was deprived of support from the west. The self-styled emperor was therefore welcomed as a saviour.

In the tradition of Alexander and the great heroes of the past he at once launched upon a campaign of conquest, attacking both the territories still in Byzantine hands and those held by the Seljuk Turks. His success was at first spectacular; and by the time the war had turned against him, and his empire, which had seemed likely to spread over Asia Minor, had dwindled to a strip of coast near the capital, he had already firmly established himself as its ruler. With a grand gesture typical of the Comnenos emperors, who, good or bad, never lacked *bravura*, he had even appointed a patron saint for the new empire. This was Eugenios, a local martyr executed by Diocletian for destroying a statue of Mithras on the craggy Mount of Mithrios overlooking the city. Here Alexios erected a handsome church and monastery in his honour.

The population had frequent cause to invoke his protection. On one occasion the city was only saved by the direct intervention of the saint, when the Seljuk Turks, encamped in the monastery, with the Emir's concubines lodged in the church, were put to flight by a miraculous hailstorm. Such hairbreadth escapes were not unusual in the history of Trebizond. From first to last, the empire was almost continuously menaced and attacked: by Seljuk Turks, Mongol tribesmen, Turkoman hordes, the terrible Timur, and finally by the Ottoman Turks who conquered it. Several times it sank to the position of a vassal state, paying tribute to Turks or Mongols; its frontiers, always fluctuating, sometimes contracted nearly to the city walls. Generation after generation of the Comnenos emperors led their armies into unequal battle; in the intervals they had to fight their own rebellious subjects. Indeed their lives were so desperate, their deaths so dreadful, that one is positively relieved to learn that one of them died from a fall when playing Tzouk-

anion, a game resembling polo.

They none the less invariably kept up a splendid appearance. The Spanish ambassador Gonzalez de Clavijo, passing through Trebizond in 1404 on an embassy to Timur at Samarcand, was greatly impressed by the Emperor Manuel II and his son. The emperor, like all his family, was "tall and handsome". He and his son were dressed in their imperial robes. They wore "tall hats surmounted by golden cords on the top of which were cranes' feathers, and the hats were bound with the skins of martens". But the condition of Trebizond was at that time precarious. The emperor paid tribute to Timur. His son had recently made civil war on him. His subject chieftains behaved as independent princes, as Clavijo discovered when Leo Kabasites stopped him outside his castle and exacted a heavy toll in the form of a silver dish, scarlet cloth, fine linen, and a bale of camlet which Clavijo was forced to buy from a merchant of his own caravan.

If the Comnenos emperors were reckless in war, they were also shrewd diplomatists, skilful in manoeuvring relations with rival sovereigns and arranging advantageous dynastic marriages. So Joannes IV, threatened by the Ottoman Turks after the fall of Constantinople, married his daughter Katherine to Ouzoun Hassan, celebrated chieftain of the White Turkomans, as the price of his support. But even this ferocious warrior was no match for the Ottomans. Suing for peace he left David, successor to Joannes, to face the enemy alone, and the emperor had no choice but to surrender. So in 1461, eight years after the collapse of Constantinople, Trebizond, the last of the Greek states to have kept its independence, fell into Turkish hands.

The Turks victimized the population with their habitual ruthlessness. The emperor, however, was humanely treated, for he was shipped to Constantinople with his treasure and family and allowed for a time to live unmolested. But when a letter was intercepted addressed to him by Katherine, wife of Ouzoun Hassan, inviting him to send her one of his sons, he was immediately seized. The Turkoman chieftain, undismayed by his defeat, had reorganized his forces and conquered Persia. A plot to restore the Empire of Trebizond, with a Comnenos prince at its head, was, with good reason, suspected, and David was executed together with all his seven sons.

Or so say the history books. According to the Comnenos family chronicle one of his

The Venetian fort at Oitylon, in the district of the Peloponnese (Morea) known as Maina, from a travel-book of 1598. According to the Comnenos family chronicle, a son of the last Emperor of Trebizond established himself in Maina, the family later adopting the name of Stephanopoulaioi

From Viaggio da Venetia a Constantinopoli, *da Gioseppe Rosaccio (Venice, 1598), by courtesy of E. Seligmann*

sons, called Nicéphore or George, feigned conversion, escaped the massacre, and reached the court of Ouzoun Hassan in Persia.

The story of the Comnenos family, for the next two hundred years, depends on this chronicle. It is a document that reads like the most extravagant of the romances of chivalry. Yet it should not be automatically discredited on that account, for in fact this second escape and survival of the family is rather less improbable than the first, historically-authenticated escape from Constantinople and the creation of the Empire of Trebizond. Moreover the chronicle does no violence to history. Katherine, wife of Ouzoun Hassan, was a real person, and there is historical evidence of the existence of a certain George, the youngest son of the emperor, who was separated from his family and compelled to become a Mohammedan. According to the historians he was murdered with the rest of his brothers. But this hardly squares with the historical fact that the Emperor David was offered his life if he consented to change his religion. It is in fact easier to believe the family chronicle and that George-Nicéphore was spared and found his way to Persia.

According to the chronicle he was not allowed to remain there long, for Ouzoun Hassan was by then unwilling to make war on the Sultan and feared that his presence might provoke reprisals. Disguised as a beggar, the young prince travelled to Maina, in the central peninsula of Morea. This again is less fantastic than it might seem. Morea was the last province of Greece to have been conquered by the Turks, and that which put up the stiffest resistance. The inhabitants of Maina were warlike mountaineers, descendants, it is said, of the ancient Spartans. If the Comnenos prince entertained hopes of re-establishing his power, it was in Maina, ever ready to revolt, that he might have found a following.

His imperial descent seems to have been unquestioningly accepted by the inhabitants. At Oitylon, a port on the west coast of the peninsula, he was elected protogeront, or chief senator of the region. With the family flair for advantageous alliances he promptly married Helen, daughter of the archont Petros, and in his marriage contract of January 4, 1473, he was styled son of the Emperor David of Trebizond.

The adventures of his descendants for the next eight generations were as dramatic as those of his predecessors, if on a smaller scale. The office of protogeront became hereditary in their family; they became heads of a powerful clan; they continued to make good marriages. They were continually engaged in war, the inhabitants of Maina being frequently in revolt against the Turks or at war with each other. Stephen, grandson of George-Nicéphore, drove a Turkish force from the gates of Oitylon, only to die ambushed in a local vendetta. The descendants of this celebrated protogeront took the name of Stephanopoulaioi, while those of his two brothers took the names of Novacchéi and Phalzéi. But later the entire family, and some of their clansmen, came to call themselves Stephanopoulaioi, to the confusion of genealogies.

Fierce clan war was being waged between the Stephanopoulaioi and a faction collaborating with the Turks when in 1670 the decision was made to emigrate. The family story now slips back into well-authenticated history. With the Turkish conquest of Crete

A. J. Th

Robert Lid

(Above) *The modern village of Oitylon stands on a hill above the harbour, separated by a ravine from the ruins of the Venetian fort. In 1670 the Stephanopoulaioi fled to Corsica, where their descendants still live at* (below) *Cargese, the first settlement having been at Paomia in the neighbouring mountains*

G. France

in 1669 hopes of the eventual liberation of Maina faded. Numbers of the inhabitants of Crete and Morea at this period fled abroad. Some settled in the Italian states; one group went as far afield as Florida. The protogeront George Stephanopoulaios secured, through an emissary, a piece of land from the Genoese on which to found a colony for his family and followers.

For some three-and-a-half centuries the Genoese had ruled Corsica. But their domination was bitterly resented by the inhabitants and much of the island was depopulated and uncultivated as a result of recurrent revolts and civil wars. The Genoese therefore welcomed the chance of settling this band of sturdy foreign refugees, bound to them by the ties of gratitude, in their problem colony.

The Greeks accordingly sailed from Oitylon, seven hundred and thirty of them, including women and children, a bishop, priests, monks of the order of St Basil and various members of the family of Comnenos. In Genoa they signed a contract with the Republic whereby they undertook to accept the authority of the Pope, while continuing to practise the Greek rite, to serve the Genoese faithfully and fight for them if necessary. Soon afterwards, in March 1676, they took possession of their new home, known as Paomia, in the mountains above where Cargese now stands.

The Greek and Latin churches, both built in the 19th century, face each other across the flowering garden of Cargese, laid out on a curved plan by the royal geometricians of Louis XVI

lub, Ajaccio

The district was fertile and healthy and included five abandoned hamlets with the beautiful names of Pancone, Corona, Salgia, Rondolino and Monte Rosso. But the houses were in ruins, and dense Corsican *maquis* covered the land. The Greeks, however, set about founding their settlement with exemplary energy, and within six years had repaid the sum advanced to them by the Republic for materials and seeds.

These years must have been a severe trial to the Stephanopoli (for thus they had Italianized their name), reduced to the position of leaders of a struggling pioneer colony. Worse was to follow. Some fifty years after the foundation of the settlement the Corsicans rose in mass revolt. The Greeks were invited to join the rebels, loyally refused, were attacked, fought a courageous retreat to the coast and embarked for Ajaccio. Here they were formed into two regiments by the Genoese. But they were fighting a losing cause. The Genoese, impoverished and exhausted, were forced back into their fortress-cities on the coasts; Pascal Paoli, the Corsican patriot,

The priest of the Greek rite at Cargese, standing before the iconostasis which separates the choir from the nave. The services—attended today by a congregation of over a hundred—are conducted in Greek; the music is the Byzantine plainsong, with some airs introduced by priests from Sicily

whom Boswell visited and described as the greatest man of his age, in 1755 declared Corsica independent and established a democratic constitution.

During these sensational events the Greeks were neglected and forgotten. In 1752, when their regiments were disbanded, they found themselves in penury. Some made a living as artisans in Ajaccio, others indomitably re-emigrated to Minorca and Sardinia. The Stephanopoli, at the lowest ebb of their varied fortunes, acted, as always, with resolution. Constantine, descendant of the Phalzéi branch of the family, became an officer in a French cavalry regiment and left the island for good; Captain Georges, descendant of the eldest branch, preferred to share the fate of his countrymen. In 1768 a ship appeared at Ajaccio bringing some exiled Jesuits from Spain. With the resource typical of his family he seized on the occasion to send a letter to the King of Spain begging asylum for the colony. Within a few months a Spanish ship returned bearing a favourable reply. But before Georges Stephanopoli was ready to lead the colony to this new home, and his own family into its sixth exile, the French had become rulers of Corsica. Genoa had ceded her right to the island to Louis XVI, and the royal troops, invading it in overwhelming numbers, had defeated the Corsican nationalists and driven Paoli to England.

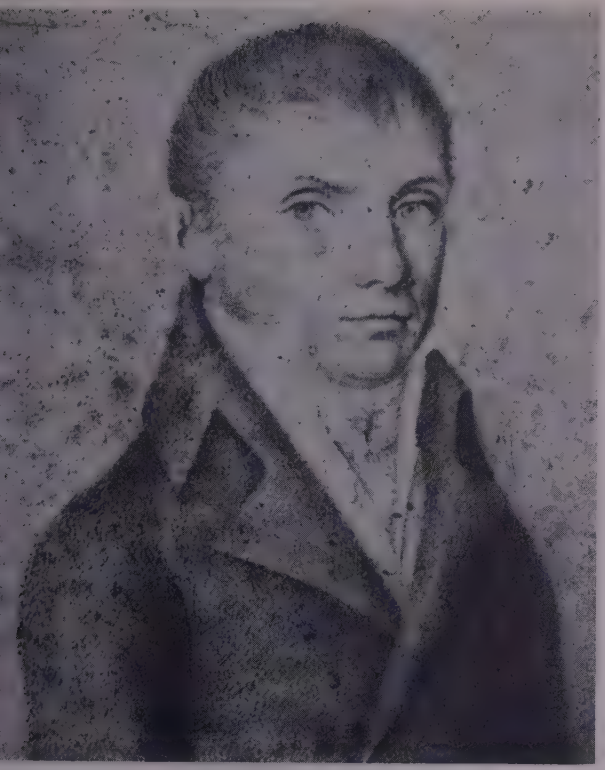
At this time the Greeks were still a distinct foreign community, speaking Greek among themselves and wearing national dress. This must have appeared spectacular in comparison with the rough brown homespun clothes, made from goat's wool, then worn by most Corsicans. According to a French traveller the men wore baggy blue trousers, red waistcoats, long blue coats and cummerbunds stuck with daggers and knives. The Stephanopoli wore violet or purple. The women had red or blue skirts, trimmed with lace and ribbon, and headdresses of the same bright colours with long muslin veils.

In response to Captain Georges' appeal the French government granted the colony the

From Histoire[t] ... [d]e la Corse, 1863. *by Jean-Angé Galetti*

G. Franceschi

(Above) *In the mid-18th century the Greek settlers at Paomia still wore a distinctive national dress. The costume portrayed in this engraving does not correspond with the contemporary descriptions: it appears in a book published in France a century later and was evidently drawn from hearsay; but the background, depicting the settlement of Paomia (by then abandoned), is more accurate.*
(Left) *The emigrants from Greece brought with them to Corsica three paintings which now hang in the choir of the Greek church at Cargese, among them that here shown of St John the Baptist. This bears a Greek inscription which reveals it as the work of "Simeon Palaeologus, priest and monk of the monastery of the sacred Mountain of Athos"*



(Left) *Georges-Marie Stephanopoli de Comnène, known as Captain Georges. A descendant of the elder branch of the family, he succeeded his father as commander of one of the Greek regiments formed by the Genoese in Corsica in the 1730s. He was recognized by the French government as head of the colony and charged with supervising the building of Cargese. The present head of the family, M. Nicéphore Stephanopoli de Comnène, born in 1885, is his direct descendant.* (Below) *Georges-Constant Stephanopoli de Comnène, brother of Prince Demetrius de Comnène, who obtained his title by a grant of letters patent from Louis XVI after travelling to Maina to obtain proof of his imperial ancestry. Both brothers died childless*

Both portraits reproduced by courtesy of M. Nicéphore Stephanopoli de Comnène

territory of Cargese, and in 1776 the Greeks were able to move into 120 completed houses. Cargese, then as now, presented a striking contrast to the romantic but incommodious Corsican villages, built like fortresses on rocky mountain pinnacles. With its three superimposed boulevards, following the arc of a hill above the sea, curving like the arms of a horseshoe to enclose a garden at its base, it embodied, if on a modest scale, the sense of space and symmetry of French 18th-century urban design. Later two churches, Greek and Latin, were built facing each other on either side of the garden.

The colony was much favoured by the presence of Marbeuf, the governor of the island. In 1778 Louis XVI rewarded him with the title of marquis and lands near Cargese. There Marbeuf built himself a magnificent country house, luxuriously equipped with porcelain baths and courtyards with cascades and fountains. Sir Gilbert Elliot, Viceroy of Corsica when Britain held the island for two years at the beginning of the Napoleonic Wars, considered it "one of the finest residences in the world, a real nobleman's palace". In deference to his visit, the Greeks presented themselves in their best national costumes, some of which, Elliot observed, had been brought from Greece by their ancestors and were gorgeously embroidered in gold. They also gave a ball in his honour at which they performed one of their national dances. This seems to have been a version of the ancient ritualistic follow-my-leader dance, inherited from pagan times and once widely known in Europe. A dance exactly similar, to judge by his description, is still performed in the remote Sardinian village of Ollolai.

Marbeuf's splendid residence was burnt to the ground with the departure of the English in 1796, when the Corsicans once again attacked the colony. Since then the Greeks have prospered. So have the Stephanopoli, who, undaunted as ever, had set about restoring their fortunes with the establishment of the French regime. Demetrius, son of Constantine the cavalry officer, contrived to travel to Maina at the expense of the French government to obtain proof of his imperial ancestry which was sufficiently convincing to allow Louis XVI to grant him the title of Prince de Comnène. In the letters patent of 1782 one can read the genealogy by which he traced his descent in direct line from David, emperor of Trebizond, with the details of the birth and marriage certificates which he furnished to substantiate his claim.

There is nothing to criticize in this genealogy except that it conceals the existence of the elder branch of the family of which Captain Georges was the descendant. As though in punishment for his presumption, Demetrius died without a son. His brother, Georges-Constant, who inherited his title, died childless. So the ill-gotten title became extinct within fifty years. Meanwhile the elder branch of the family had already achieved distinction when in 1837 Michel-Nicéphore, grandson of Captain Georges, married a great-niece of the Prince Bacchiochi and of Elisa, Napoleon's sister, archduchess of Luca and Piombino. Other members of the family have made successful careers as doctors, administrators, diplomatists, writers and archaeologists.

Such was the tangled dramatic story of triumph over outrageously adverse circumstances told to me by Nicéphore Stephanopoli de Comnène, descendant of Captain Georges and present head of the family. Meanwhile the congregation was filing to the Greek church to celebrate the Easter ceremonies. The Greek rite is today the main surviving evidence of the foreign origin of Cargese. The exotic national dress has long ago been discarded, the dances forgotten; the language is known, and that incompletely, to less than a dozen of the inhabitants. But a congregation of over a hundred still practise the Greek rite, ministered to by a French-born priest, a picturesque figure with long white hair and beard. The church, built in the 19th century, has nothing Oriental in its architecture, but inside one finds a gilded iconostasis, and several paintings brought by the emigrants from Greece and piously preserved throughout their struggles. The most remarkable is a curious stylized representation of Saint John the Baptist with outstretched wings, a haggard saint of the desert whose privations and wanderings might be held to symbolize those of the much-tried Greeks and their leaders. An inscription reveals that it was painted by one Simeon, monk of Mount Athos, who also bore the name of Paleologus, that of another fallen dynasty of Byzantium.

As for the Stephanopolis, they live quietly in their large house overlooking the churches, the garden and the sea. If further indication be sought to add to documentary evidence of their imperial descent, it surely exists in the extreme distinction of the present head of the family. A thousand years' tradition of authority may well be needed to produce a modesty so unusual.

Berbers of the High Atlas

by HUMPHREY BECKETT

One of the chief aims of last year's Oxford University Expedition to Southern Morocco was to make a land-use survey of a remote valley in the High Atlas. In so doing its members discovered, as herein described, how such an isolated Berber community, intolerant of external regulation, manages its affairs. The expedition received a grant from The Geographical Magazine *Trust Fund*

It was our first visit to the Ait Rbaa valley. There had been men and women working in the fields as we came down the steep path from the pass. We had heard a man shouting to scare the birds off his crops, another had been thinning out his maize, and women had been washing clothes at the stream. We had seen this microcosmic picture of the village undisturbed, from far up the mountainside. But as we approached, we realized that now there was not a man or woman to be seen, and our guide began to be worried. We stopped. One by one the women appeared on the roof-tops to spy out our movements. This Berber village had followed its customs of the time of tribal war, when only the women were safe from an invader. It was as if it had gone into a state of siege, and we were the enemy, to be watched and guarded against until our purpose was made clear. And so we sent our guide and the guard from the palace of the Pasha at Marrakech to explain our visit to the sheikh, who lived, we were told, in the furthest of the six villages in the valley.

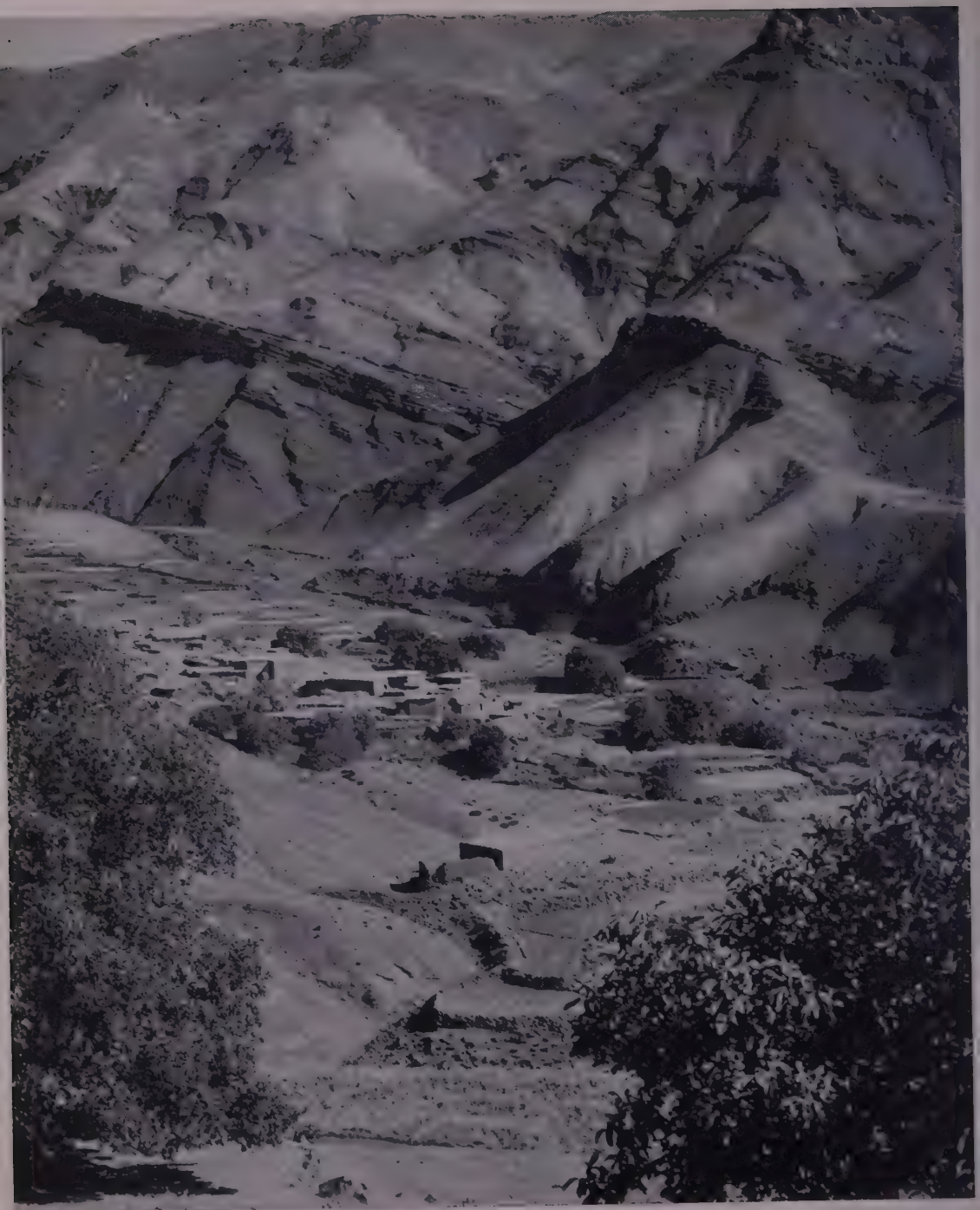
We had been waiting an hour, when a man came running, his *djellaba* (a hooded robe) hitched up above his knees, to call us to the sheikh.

The sheikh, a stoutish man with a scar beneath his left eye, greeted us formally outside his house, and preceded us into a long and austerely whitewashed room, in which the only relief was a single print of the Prophet's tomb. From the windows we could see down over the shambles of roof-tops and alleyways that made up the village, to walnut-trees and an irrigation ditch that curled around them, and beyond to the stream that ran down the narrow valley. Several elders, looking immensely dignified, followed us into the room and sat about the walls. There was a tense silence. A young man began to make tea over a brazier, and another waved a fan to keep the flies away. They unbent. Frenchmen came seldom to the valley, they said, and Englishmen they had never seen; and as far as their dignified reserve allowed it, they were intrigued. As for ourselves, we had been so struck by the isolation of this community and by the bearing of its people, so different from the men who had hung about the French *cantine* that we had left that morning, that we made our decision to stay regardless of convenience and accordingly opened negotiations.

When we arrived, and had made our camp at Idirh, there were many who were still wary of us. But the sheikh had given his approval and curiosity could be let loose.

There was one small shop in the village, where sugar, tea, coffee, dates and carbide could be bought, assuming, that is, that the shopkeeper took the trouble to borrow mules to go to the stores at Tadders on the main road four hours away. It was only a minute hovel of a room, with a counter made of tea-chests, but it faced onto the small open space at the centre of the village, and five or six men sitting on top of each other could just squeeze in to pass the time of day; and that was really why it existed. Here, squatting on sacks, while buyers kicked aside children to lean in from the doorway and make their purchases, one would hear who was getting married, what the latest prices were, the news of the incidents in the towns, and any scandal picked up at the market. The shop was one of our earliest contacts with the village, and it was in the shop that we learnt when X was ploughing, or when threshing was in progress.

The terraces had been scratched and scooped out of the soil on the lower slopes about the stream. Maize, barley, rye, millet, roots and hemp were grown on these narrow strips, each of which was laboriously watered from a labyrinthine system of irrigation channels. To plough was an intricate job. Carrying the back-breaking water-jars, herding and milking the cows, fetching firewood down the mountainside, and gathering reeds for fodder were all jobs done by women; but ploughing was man's work. One man and



All monochrome photographs by the author

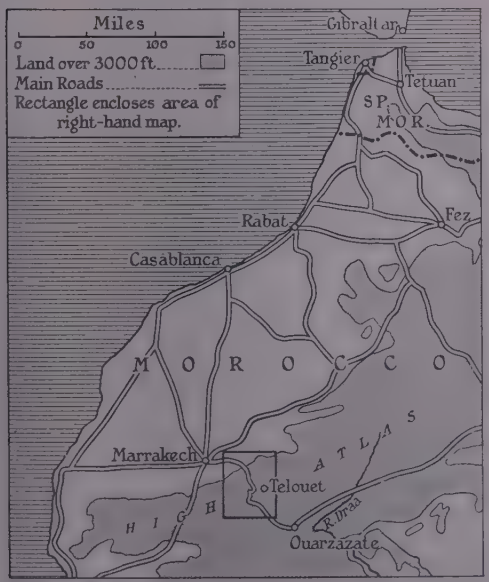
"The Ait Rbaa is a poor area". Beyond the mosque—the small, box-like building in the foreground—stands the largest of the six villages of the community, isolated within a narrow valley near the top of the High Atlas range. Flocks of sheep and goats grazing high up the surrounding mountains, and hemp grown in the fields, are the only source of marketable wealth

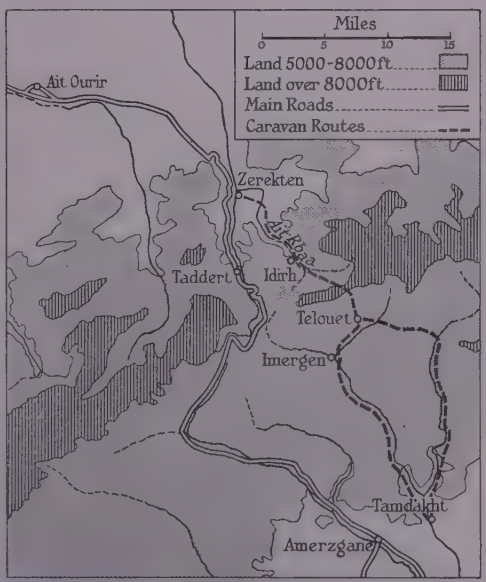
two mules climbed steeply up to the terrace, the second man carried the plough in three sections; then, when it was assembled, the pair would work back and forth on this piece of land the size of a postage-stamp. But the terraces were ploughed, and not a scrap of fertile earth in this infertile valley was wasted.

It was made clear to us that there were three 'respected' men whom we should visit, three men who dominated the affairs of the village, and whose answers were most likely to resolve our problems concerning the agriculture and the history of the community. The Ait Rbaa is a very poor area; there are no palatial castles or elaborate houses with arcaded terraces and well-carpeted floors to cater for a life of ease. Outwardly there was little to distinguish these three 'respected' men; but they were rich to the point of security, which was unusual, and two at least had been able to make the pilgrimage to Mecca.

We met Si Hadj Lhassan one clear morning, coming up from his fields with an adze over his shoulder. He had a sharp face that betrayed his keen intelligence. Apologizing for the scanty reception he could give us, he swung open the door of his house. Once inside, we were in darkness, and could only just see that we were being led past huge heaps of dung and a mule tethered to a wall, towards a long sloping passage, made to take animals up to the higher storeys of the house. We only came into the light again when we entered a small, mud-plastered and completely bare room above the door. Our host bundled in a black-and-white village rug, which he spread on the floor, and called for a boy to blow up a brazier for tea.

We were talking of the path that led up the valley, over the high col and on south to Telouet, when the Hadj surprised us with a piece of information. This path, he said, had once been part of the great caravan-route from Marrakech to the south. The caravaneers had come through the valley with mules, camels and slaves, and at nights had found lodging in the villages. He well remembered this route, before the French built the road from Marrakech to Ouarzazate and finished the trade for ever; and like everyone else he had made quick money running his mules with salt and sugar to the south, and back with dates to the north. Those were the days of "*siba*", the days when the mountains and the semi-desert beyond remained in the hands of tribal rulers or small and independent communities, who ruled by ancient Berber custom and fought among themselves; when no-one was safe from ambush and every traveller carried his gun in his hand. They had fought and lived like men. But the Hadj scorned regret for the past. Living was easier now. There was the bus that spared them arduous journeys for even the barest necessities of life. They had more time to farm their land and provide food for their families. He had five





A. J. Thornton

The houses of each Ait Rbaa village are joined together in confusion. Within, the rooms are dark and lice-infested. Here, above a stable, two rooms—one where the men eat, talk and sleep, and one where the wives cook and look after the children—accommodate two brothers and their families

younger brothers up the mountainside with the family sheep; certainly in these days you grew prosperous if you worked.

About the only break from the monotony of village life that the men of this now-isolated valley ever had, was a visit to the *souk*. Souks are purely local affairs. But around the stone booths of the market one can buy sugar, tea, dates and cotton clothes and meet old friends for talk.

With our interpreter, I left early one morning, in the hour of soft, diffused light before sunrise, to go to the Thursday souk at Telouet. The first woman passed us with her jar, going to fetch water at the spring. An old man was shaking out a rug on the roof of his house. A younger man came striding out of the village with an adze, to look at his irrigation-ditches, since it would be his turn to have the water when the evening came. We made a detour to swing round the mountaintops, and passed a shepherd encampment with its cluster of tiny stone shacks, roofed with juniper boughs. Women were strolling round the camp, their babies in their arms, chatting to their neighbours, like gypsies, with all the time in the world on their hands. It was nearing midday as we dropped down to the market, and a scorching wind was blowing dust across the small plain, making it oppressive to walk. A two-way stream of traffic passed to and from the souk—men were coming away on their mules, clutching chickens and sacks, a child or two on the animal's neck, and flouncy wives in yellow dresses astride behind them with babies strapped at their backs; old men sat heaped on the haunches of long-suffering donkeys, their toes almost dragging in the dust; others were hurrying on foot to the souk, before it closed.

Within the circle of booths there was a colourful crowd jostling round the merchants, arguing out the prices and greeting acquaintances. In the quieter corners, where there

was shade and where water could be boiled, little groups of men gossiped over tea. We made our purchases, found a friend with a mule to take them back for us, and sat down wearily in the shade of a tree, to rest until the day was cooler. Soon the market had dispersed; there was only a group of black-capped Jews sitting cross-legged in a circle to sort out the morning's takings, and a single Berber dozing off beside a basket of grapes.

It was late in the day when we stood at the top of the pass. To the south, the great trade-route had passed through the lower mountains and on by the palm-flanked river of the Draa, that swept south and was lost to sight in the desert; then, passing isolated, man-made wells, the caravaneers had made their way right across the Sahara to Timbuctu. It was on this route through the mountains that Moulay Ahmed El Mansur must have sent his army of 8000 camels, 5600 men, cavalry and cannon, to cross the Sahara in 1590 and seize the gold of the great Songhai kingdom of the Western Sudan. More recently the sight of regular traders had been broken by appearances of the Sultan's army to collect his taxes from the rebellious tribes of the *bled-siba*. To the north, the trade would have reached the cities, and the markets of Marrakech, where the caravans so impressed the early European visitors. But little of the route remains, beyond a broken mule-track—a stumbling, staggering track through rocks and boulders.

Behind Telouet, in the full light of the setting sun, were the strange, yellow, eroded mountains, like sand-castles washed by the sea. To the north, the shape of the valley of the Ait Rbaa was indistinct in a hazy glare. Down at the bottom, some 2000 feet below the pass, lay the villages hidden in the shadow of the mountains.

Coming down into the valley, we heard it. The whole valley was singing. The shepherds up the mountains, the women bringing in cows, the children in the fields and the men changing the direction of the water in the irrigation channels were all singing—a strange, lilting, wordless song that echoed against the mountainside. It was the same every evening; and of all our experiences it was the most moving.

At present the people of this community are isolated and dependent upon their own resources. Having few contacts, either econo-

Among the Berbers traditional customs have survived longer than racial purity: there are skins of every shade, a mixture due to mass movements produced by poverty and wars in the past

Above) *The main road, ten miles to the west, drew the traders away from the Ait Rbaa valley that once ked Marrakech with the mountains and the south. Now, the community depends entirely on agriculture.*
elow) *Techniques remain primitive. Corn is threshed under the beating hooves of mules and donkeys*

mic or social, with other communities, their life is confined to their own narrow valley. They are a part of the vast territory under the rule of the Glaoui family. But whereas before they had been involved in commerce and far-reaching political schemes, now, less interfered with in their day-to-day life, they are freer to live according to ancient tradition.

We had some opportunity of seeing these traditions at work. There is in Berber custom—it is not our discovery—a system of punishing crime for the benefit of the local community that is very satisfactory to all concerned; provided, of course, that there is no government expecting to share in the profits as well. It is the custom of *insof*, and gives full scope to a people with a sense of humour. One afternoon we were told that a man had been caught stealing figs, and would we come to the village to collect "the goat". A little mystified, we made our way up to the shack that served as mosque, where a laughing crowd was gathering about a man carving up two goats. (Hadj Lhassan was very obviously in charge of proceedings.) The slaughterer was the thief, who, caught in the act, was compelled to kill two goats and divide them up amongst all the households in the village. By now we were considered part of the village and took our share. We were gratified, but did not relish the goat, which was of a toughness and flavour beyond imagination. Perhaps the only relief in the life of these witty, intelligent people, now bereft of contact with the busy, cosmopolitan Arab world, was the pleasure of passing the day in talk with their neighbours; excepting, of course, the very rare visit to the city, when wives were firmly left behind, and no-one asked any questions afterwards. As time went by we were, within limits, accepted and we could take some part in the time-passing, mint-tea-drinking social life of the village, that went on at any hour and at any place, whether it was up a mountainside or in the shade of a tree. Old men bewailed the fact that the days of travelling and of fighting on the Draa were over; younger men discussed the latest actions of the sheikh, complained about the taxes, or joked among themselves.

In travel pamphlets, with photos on the cover of magnificent horsemen against unclouded skies, the Berbers of Morocco have been called liberty-loving democrats. Rather, they are a people—this is only our impression—who refuse to admit any system governing them. There is, it is true, the Pasha, with

A level space outside the village where the wind can catch the chaff, tossed in the air, serves as a threshing and winnowing ground. Firewood has to be foraged from the bare hillside beyond

All Kodachromes b

The men of the Berber mountain villages impress the traveller by their bearing and intelligence. Their way of life and their history have been conditioned by an indomitable sense of independence

his arbitrary taxes and demands for service, and his political supervision over them. There is the sheikh who sees to these things, and who may or may not be accepted as a trustworthy judge over minor disputes. And there are the 'respected' men of the community who exercise a vague and never defined influence. But for the running of day-to-day affairs in the villages, the people swore that there were no systems and no regulations, that "everyone knew what should happen"; and they would have had us believe that things did happen of their own accord.

Controlling irrigation, which was a problem of great importance for our land-use survey, we knew that there *was* a system: it had been made in three days, when the road was built, the mule-trade finished, and the Ait Rbaa turned to farming in earnest; it was a ponderously complicated system. And, however carefully each man was allotted his inexorable quota of water, co-operative effort was involved in it. New ditches had to be made, old ones repaired; and in times of drought or flood, special conditions obviously required some kind of general assembly to discuss what should be done, since irrigation was not within the jurisdiction of the sheikh. This was the crux of the problem, for everyone claimed that there was no such thing as an assembly, repeating *ad infinitum* that they all "knew what

(Above) *First built a century ago, the vast fortress* (kasbah) *of Telouet—seen in the distance—expanded with the Glaoui family's growing 'empire', for which it is still the administrative centre.* (Below) *In the forecourt of the kasbah, mules are loaded with the expedition's stores and equipment*

Before the Glaoui conquest of wide territories in the mountains of Southern Morocco and beyond, warfare between local communities was rife. Communal storehouses, such as this building on a rock, served as fortresses in which the people of the village could defend themselves in time of siege

should happen". It was a problem that was resolved when we learnt quite incidentally that such questions were often discussed at the meeting for prayers in the mosque every Friday—an occasion when of necessity everyone was present. In fact, this was the assembly we were looking for. There is a system for irrigation and an assembly of the community to regulate it (as there is for everything else). But, what is more important, it is a system and a form of organization so incidental to daily life that no-one is conscious of its existence.

This is only one example, but it shows how the little community lives and runs itself, refusing to admit that a law, system, or regulation has anything to do with it. Since it caused us so much headache, it is our strongest impression of these 'liberty-loving' Berbers. To us, it was the core of the individuality that distinguished them. Of course there is law concerning marriage and suchlike affairs, but that is a different matter. Perhaps it is because they refuse to tolerate any regulation of their life that these Berbers have always remained in their isolated mountain communities until individual genius unites them —the Almohad empire over Spain and Barbary in the 12th century, Abd-el-Krim in the Rif, or that of the present Glaoui family in the south.

When our visit was nearly at an end, there was a feast; at night the village gathered round its open place. Boys threw wood onto a fire, and sparks flew up in a billow of smoke. The intermittent light showed the heads of those that quietly watched the dancers from the roof-tops, and the bent figures of men, huddled in cloaks and rugs, about the walls. The fire sparkled and flared, then slowly died again, and a line of men and a line of women gently swayed and turned about a leader in between them. It was the men who set the drum-beat and, as the inclination took them, launched into a soaring song, impromptu, sometimes witty, sometimes philosophical, sometimes regretful, sometimes prayerful, echoed by the women. And so this wistful dance went on, long past the time when the children were too sleepy to throw more wood on the fire, and the watchers had crept away to sleep.

Conversations on the Copperbel

by JEREMY JEFFERIS

All Kodachromes by

An African 'township' : rows of hygienic concrete huts house the mine-workers and their families

Mining is the spearhead of the Western industrial impact on the life of South and Central Africa. The copper-mining companies of Northern Rhodesia have acknowledged their share of responsibility for its results and both the large interests concerned are providing for the advancement of their African employees as well as contributing to the general welfare of the Central African Federation

In the summer of 1955 I was fortunate enough to be able to spend two months at one of the largest mines on the Copperbelt of Northern Rhodesia. News from the Copperbelt in our daily papers and even in our weekly reviews tends to be of the "man bites dog" variety: the exceptional, not the typical, is too often reported. My conversations were almost entirely with Europeans; yet through them, as the reader will see, something could be discerned of the problem that the existence of the mines and the wealth that they earn is bringing to Central Africa; as well as of the hope for Africans that lies in its right solution.

THE YACHT CLUB

There was a brisk breeze and even as we watched two Firefly dinghies were caught by a gust and overturned; their crews climbed over the side and stood on the centreboards to lever the sodden sails out of the water. The lake was artificial and had been made by damming a shallow valley to keep water away from the mine. It was nearing the end of the Central African winter drought and the level had been dropped to cope with the coming rain. In places trees still stuck up above the water and others just below water-level added to yachting hazards.

An African waiter in white brought us drinks on the club balcony where we sat and I listened to an engineer, giving me my first general picture of the Northern Rhodesian Copperbelt.

"Africans and Arabs took copper ore and smelted it in this part of the world, centuries ago. But the area was so difficult to get at that large-scale production did not start till the 1920s. Now, with the mines on the Belgian side of the border, the Copperbelt is producing over 15 per cent of the world's copper. There are two large interests running the seven or eight mines in Northern Rhodesia: the Anglo American Corporation of South

Africa, whose capital is largely South African, and the Rhodesian Selection Trust, whose capital is largely American. Copper is fetching £400 a ton at the moment, half of which is profit over production cost. There is a fear that this price will drive people to look for a cheaper electrical conductor than copper: although aluminium has practical drawbacks, they may be removed in the near future. That is one of the reasons why R.S.T. sell their copper at a fixed price, lower than the price that is being offered on the open market. A lot of the profit from copper is being invested in increasing efficiency throughout the plant: better ways of firing the boilers in the power station: more plant for extracting valuable by-products. The cobalt plant produced well over 1000 tons last year. Cobalt is fetching £2000 a ton."

I did some swift mental arithmetic.

"Now there is uranium extraction coming along: new plant for the more efficient handling of fuel: 'instrumentation' with batteries of dials, so that every process in the flow of crude ore from underground can be watched from central points."

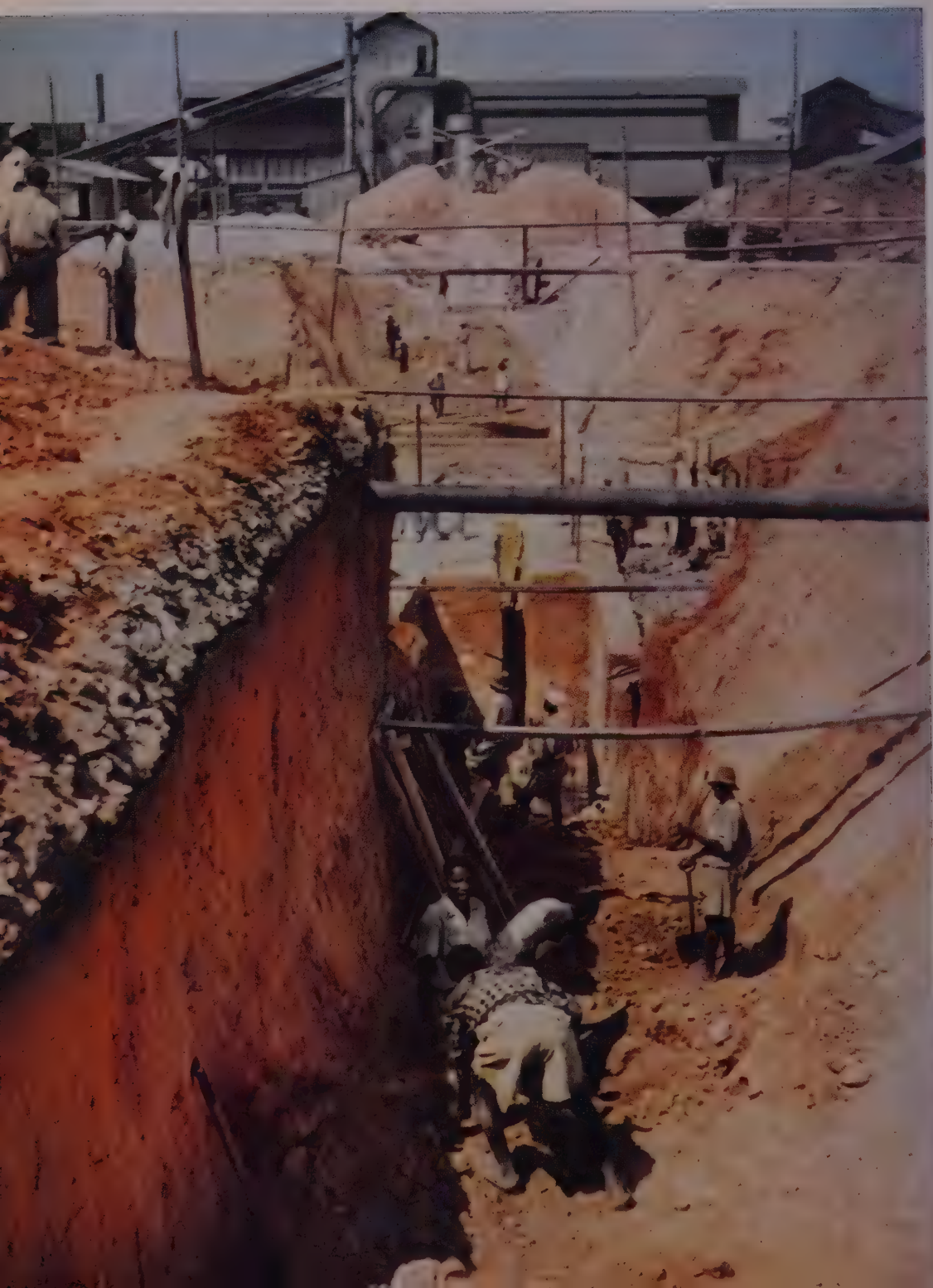
"Won't this mean that less labour will be needed? What will happen to the large unskilled African labour force?"

"There was a strike earlier this year, called by the newly formed African trade union. The European staff, about an eighth of the total, with some non-union African help, kept production up to 60 per cent of normal. If the European union called a strike, production would stop immediately. African miners earn from £7 to £30 a month; but hitherto the highest rate they could earn has been about half the lowest basic rate earned by European miners. The mine managements of the copper companies and the European trade union have recently agreed together to allow Africans to train for and take twenty-four new categories of more highly skilled,

A queue of young Africans registering for employment or pay at the mine offices for African administration. Lured by the high wages and modern amenities they come to the Copperbelt from all parts of central and southern Africa: from as far as Angola, Mozambique and the Union to the south, from Nyasaland to the east and the Belgian Congo, Uganda and Tanganyika to the north. An increasing number are signing on again after their original contract has terminated, instead of returning to their villages. They and their families are beginning to form an urban nucleus without any village ties. These Africans would find it difficult to go back to subsistence farming in the bush. The Africans' best clothes contrast strongly with the more or less patched-up rags they use for working dress

Miners leaving the cage after working an eight-hour shift below ground under European supervision

At the Copperbelt mines a large investment in new surface plant is being made. Contractors' labourers dig foundations in the poor, sandy soil for a new coal-tippler to improve the handling of fuel



better paid work.

"The chairman of R.S.T., Mr R. L. Prain, has publicly declared his company's share of responsibility towards the natives and the Central African Federation as a whole. Both groups of mines are contributing large sums towards the new Kariba Gorge hydro-electric scheme, which will benefit Southern Rhodesia and the agricultural areas as much as the mining districts. They are adding to the railway's rolling stock and increasing the capacity of Rhodesia's only collieries, run by Anglo American at Wankie. Of course all these contributions to the general welfare are also self-interested; it remains to be seen whether the Companies are going to interpret 'responsibility' as extending much further than that."

We watched sails flap viciously as boats came in. Wives knitted and gossiped out of the sun. Children splashed in a wired-off part of the lake, which had not yet been infected with bilharzia. Small hydroplanes spluttered and roared round a course, with their drivers crouched in the cockpit. The car-park was filled with a large assortment of new British cars. I was offered a lift back to the mine township, about five miles away.

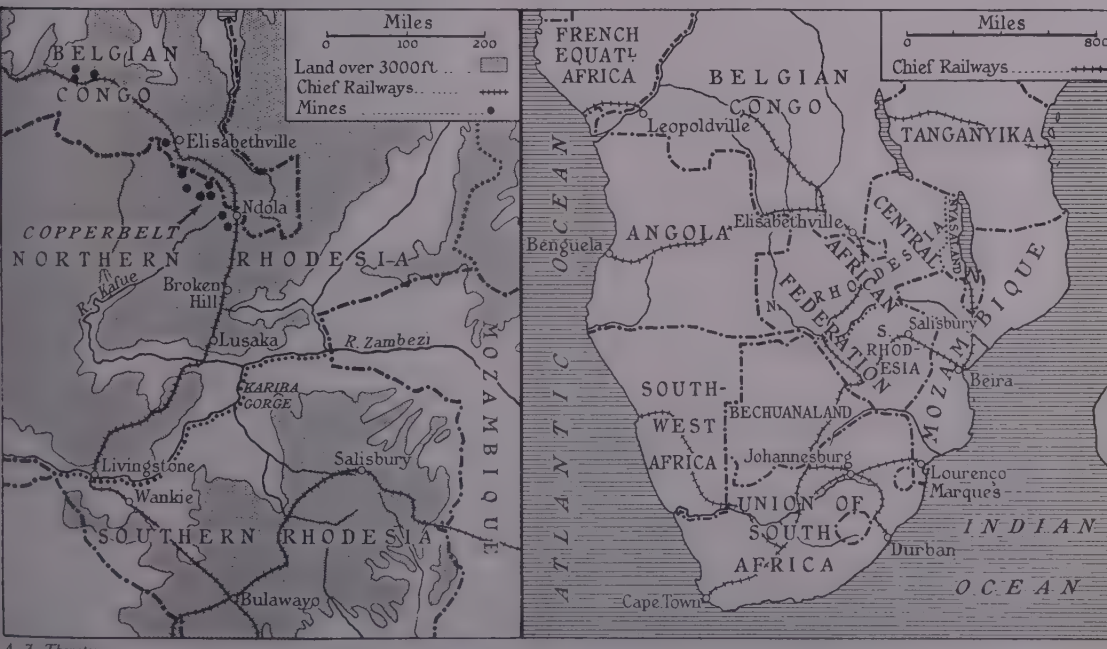
On the way we drove past an African compound (or officially, 'African township') where piccanins and chickens scrabbled in the dust between rows of whitewashed concrete and corrugated iron huts. Said my companion: "The houses all have W.C.s and the newer ones have showers. A European knocked an African off his bicycle here, last year, and drove on: the next car stopped to help the African and was stoned by men and women from the compound. The driver lost an eye for his trouble. Moral is, don't stop, drive straight on and tell the police."

Hibiscus flowers flamed in the dusty hedgerow and the ever-startling blue of the jacarandas arched over us as we drove between trim suburban rows of European bungalows. If the standard of the African houses was high for Africa, that of the European houses would be quite high for North-Western Europe and was, I gathered, extremely good value for the rent charged by the mining administration. I was set down at the gate of the swimming-pool.

EUROPEAN SWIMMING-POOL

A swirl of sulphur dioxide-laden smoke mixed unpleasantly with chlorine from the pool as we lay on the grass, which stayed green only with constant watering. Overhead the flying club's new glider looked for thermals above the great chimney. Apprentices in shiny bright-coloured swimming trunks dived from the top board, turned cart-wheels, flexed their muscles, chased each other and a young Danish learner-miner demonstrated Yoga in a corner.

A miner showed us his monthly pay-check



A. J. Thornton

with some satisfaction: it came to nearly £150.

"The copper bonus," he said, "stands at 95 per cent of our basic wage at the moment. Of course the mine is putting a large part of that aside: some in compulsory, the rest in voluntary saving. I was a sergeant in the British army (field security) before coming out here. I have a gang of about a dozen 'boys' working under me, including a boss-boy; I'm lucky in my boss-boy, as he has been with the mine for nine years and knows his stuff and most of the time I can leave him to keep the gang up to it. The Afrikaners from the Union don't stand any nonsense from their boys. They say that people from Blighty start by treating their Africans too gently and end up by being worse than anybody. Bob over there has always been polite enough with his gang and seems to get the results."

I thought of my visit underground and the din 2000 feet down, away from the whitewashed and well-lit main hauls, where they were drilling blast-holes: the light from the lamps on the boys' helmets (European miners seemed to prefer wearing the lamps slung over their shoulders by the battery leads) and the air tinged with sweat and burnt explosive.

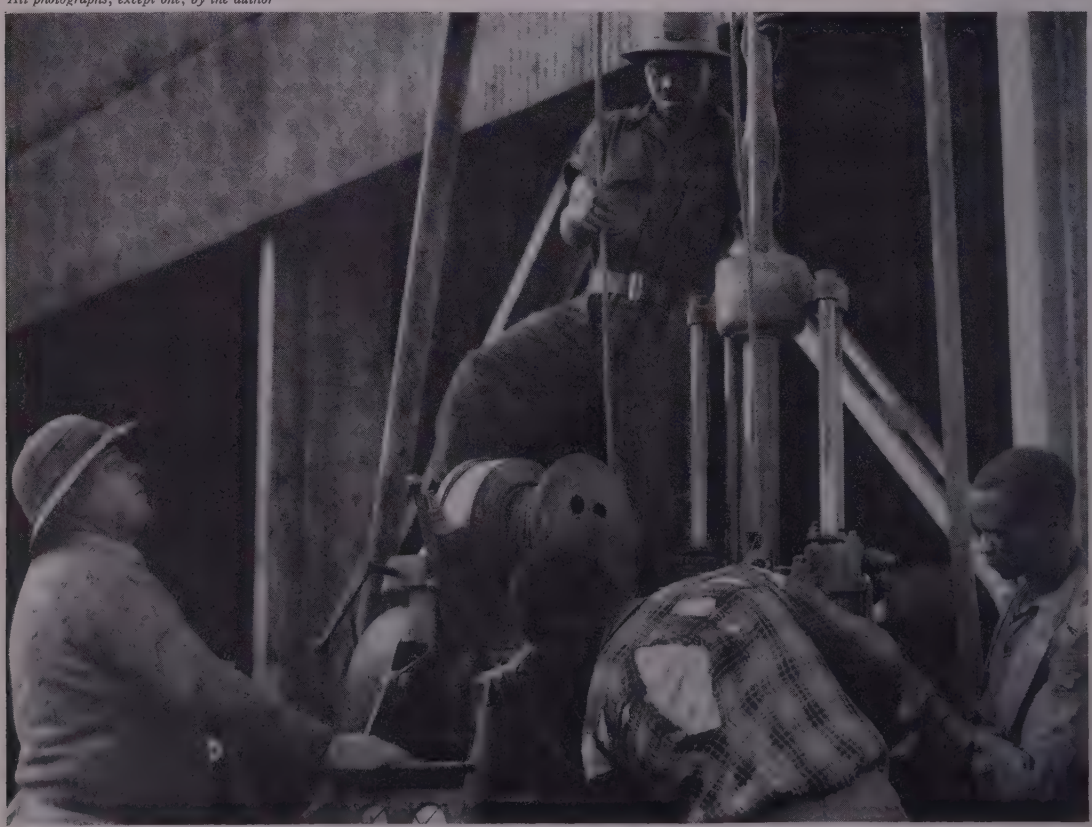
A DIAMOND-DRILLER

Toby was an American diamond-driller (that is to say his drill-heads were tipped with tungsten-carbide steel embedded with industrial diamonds). He had been in South Africa since the late twenties and still wore a grubby topee from the days when "men were men and the death-rate was noticeable".

His team of five boys had been with him for six years. At the moment he was using a small manoeuvrable diesel drill for taking soil-samples down to forty feet around the foundations of buildings in the smelter area. He disliked leaving his large rig, half a mile away in the surrounding bush where his only disturbance had been African funeral parties on the way to their cemetery.

Labour relations depend largely on the individual European in charge. The chief obstacle is the lack of a common language. Chikebanga, the lingua franca *of central Africa, is despised by both African and European and barely suffices for instructions. Not many Africans speak much English*

All photographs, except one, by the author



(Right) *The heat and the sulphur dioxide fumes from the molten copper and slag fill the roof of the smelter aisle at a mine in Northern Rhodesia. The operator in the cabin of the travelling gantry crane, at the top right of the photograph, has to wear a respirator. The molten copper is taken from the smelter furnace and poured from the great swinging ladle into a convertor, a giant rotating drum through which hot gases are blown.* (Below) *From the convertor the molten copper is poured into moulds on a rotating belt. With rods the workers lever 400-pound slabs of blister copper out of the moulds. The molten slag is taken off in railway trucks and tipped down a slope about quarter of a mile away in a glowing stream which is visible from some distance at night*

(Left) *There is scope for every kind of sport and activity for Europeans on the Copperbelt, from polo and rugger to golf and flying. At this fairly new yacht club, on a lake in a valley dammed so as to keep water from the mine-workings, racing takes place every Sunday among various classes of dinghy, which are imported from England.* (Below) *European housing is good by any standard, though in spite of continuous building the demand still outruns the supply. Housing is heavily subsidized by the mining companies and thus, at an average rent of £4 to £5 a month, is a bargain for mine employees. Cheap housing, low taxation and domestic servants at £5 or £6 a month keep down the cost of living*

By courtesy of the Anglo American Corporation of South Africa, Ltd

(Right) *African children on the Copperbelt are well looked after and thrive in the comparatively disease-free conditions. They receive free medical attention and a morning dole of nutritional stew. Elementary education is far from universal and nowhere touches European standards, but is improving. There is a new maternity clinic and the birth-rate is very high.* (Below) *The 300-foot mine-chimney with its perpetual plume of smoke looms behind miners' wives as they queue for their weekly rations. These are dietetically balanced and include maize-meal, meat, sugar, cocoa, vegetables and fruit. Issued in addition to the miners' pay, they well exceed in value the amount laid down by law*

"Jesus, Jeff, you should hear the din they kick up; anyone would think it was them was going for the high jump."

There was an enormous contrast between the rarely punctuated silence of his normal working-place and the fiendish clatter of the smelting-plant area which would have drowned the loudest African mourner. In the foreground a pneumatic drill was breaking up old concrete. A five-ton iron ladle for transporting and pouring molten copper was being rhythmically banged on the ground by a gantry crane travelling on rails high up in the roof of the dusty sun-shafted darkness of the great smelter aisle. Now and then a cloud of sulphur dioxide from the smoke-stack of the cobalt plant would drift down and rasp the throat and set the eyes watering. Toby gave some instructions in Chikebanga, the lingua franca of a large part of Central Africa, being made up of words from several native dialects, English and the odd Portuguese and French word; he went over to his large battered American car and swigged tepid tea from a bottle.

"When I'm out on the job the boys can do a lot without my saying a word. Joseph there" (he indicated one of his team who wore cracked old gum-boots, a tattered shirt and shorts and the jaunty wreck of a panama hat covered with green and aluminium paint) "Joseph's bright; the others play around like a lot of kids when I'm not looking but Joseph notices things and remembers.

"Funny lot, the Munts, there they are driving trucks, some of them, and wearing decent clothes; but some times of the year they are too dead scared to go home in the dark; they say an old witch-doctor who kicked the bucket years ago comes down from the Congo and spirits them away. In August and September sometimes they will spend all night together round a fire on the drilling site rather than split up to go home."

A PHYSIOTHERAPIST

The piccanin opened its mouth to cry and the physiotherapist deftly inserted a toffee and gently continued to knead one of its legs which already looked less developed than the other. She demonstrated the failure in reflex of this leg.

"Africans get polio too; in the old days the weakly children all died; now a lot of them are brought to the hospital and survive, but the birth-rate stays just as high. There has been an epidemic of small-pox; some Africans in the compound refused either to be vaccinated or treated, with the result that whole families contracted it. Malaria has been eliminated in a five-mile circle round the mine; house-gutters and drains where water could stagnate and the mosquito breed are forbidden; no-one uses a mosquito net now. The commonest accidents to children we have to deal with are the bad burns they get from falling over their open cooking-fires."

An African orderly in white was quietly and methodically taking a patient, on his back in a corner, through a group of exercises to restore the use of a leg. She nodded in his direction.

"Thomas there is the son of the head man of a small village about sixty miles away. When he was brought in two years ago he was badly paralysed and it took me over a year to get him to his present state; he can walk very well without much help from his stick. During that time he picked up a surprising amount so I took him on as assistant. I can leave a lot to him with very little supervision. His wife and children live in the compound. Unfortunately he can't stop her drinking and I have promised to take her back to his village where his mother and father can keep a closer eye on her, and the maize beer they brew illegally is more difficult to come by."

Thomas' wife looked as subdued as a woman could in an orange cotton frock and blue beret, when he produced her a few afternoons later. We all piled into the car: Thomas, his wife and two friends who were coming for the ride. There wasn't room for Thomas' small son Jonathan (pronounced "Jonadan" due to difficulty with the "th"). Thomas was dressed in a spotless white orderly's smock and carried a much more elaborate crutch than he normally used. There were rough dusty detours where the tarmac on the Ndola road was being widened for a double lane of traffic. After Ndola we passed the houseless overgrown chimneys of the derelict mine at Bwana Mkubwa which closed down twenty-five years ago.

We turned off the road going south onto a track into the bush. The colours of the trees in late winter vary from delicate spring green to autumn gold and red and during the day the bush is silent. As we nosed our way through the dry grass we met an occasional African, on foot or with a bicycle whose chromium plate dazzled when it caught the sun.

The village consisted of a few thatched huts and some poor plots of maize and sweet potatoes. The villagers were almost all old or very

Africans put a lot of feeling into social activities. In the evenings the townships resound with dancing and drumming. Religious sects such as Jehovah's Witnesses abound. Watched by enthusiastic supporters, football teams play matches all over the Copperbelt, including the Belgian Congo

young; the young men had gone away to work in the mines. Thomas' mother and father insisted that we take three live and scrawny chickens away in the back of the car. A dilapidated bus passed us in a cloud of dust, packed with Africans and their bundles.

"Africans", my physiotherapist friend said, "are great travellers and they come from hundreds of miles away, from Nyasaland, the Union, Tanganyika, Portuguese Africa and the Belgian Congo, to earn money to take home from the mines. Unlike the ones in the Union they are allowed to keep their families in the compounds. They are issued with well-balanced rations, on a more generous scale than the law demands, and are paid comparatively high wages. Many have been on the mine for years and a new urban generation is growing up who have no village or tribal ties of any sort."

AFRICAN MISSION

After the bible class in the lamp-lit church which had been built out of local materials by a former missioner, his successor and I walked over to the bonfire. In addition to the choirs from all over the Copperbelt many Africans had come to listen from the nearby compound.

"We try to leave as much of the organiza-

tion as possible to the Africans. Responsibilities of this sort come their way too seldom, as it is, and it is what they most need; as a result there was one bus too few from Mufulira and some were left behind, but they are getting better at that sort of thing."

The choirs were announced by an energetic African who also acted as a kind of cheerleader. Each stood up and sang the hymn they had chosen; the women and girls taking the treble parts caught the red firelight in front, with the beautifully full-throated basses behind. They sang in Chibemba (the local dialect that I heard spoken by only one European, the missioner) with the same rapt quality that Africans took to America and with evident enjoyment. There was a cry and a sudden commotion among some women squatting near the fire, where a small snake had been aroused by the warmth and had been noticed; the mothers clutched their babies to them and scattered; the snake was quickly beaten to death and the choirs continued.

"Would you like to meet some of the lads at the African teachers' training school?" We were glad of the opportunity and met them in a classroom a few nights later. They asked quite a number of questions:

"How long is national service in England and at what age do young men join up?"

"Are there many witches and sorcerers in England now?"

They were about fourteen or fifteen years old. At the end they all stood up and sang us the Bantu national anthem.

One Wednesday evening we were taken to a missionary colour-film on the social problems of the Copperbelt. A few excerpts from cowboy films were shown first to warm up the audience; the noise was continuous and whenever a fight on the screen reached a climax, they would all, men, women and children, shout encouragement to the hero or insults at the villain, at the tops of their voices. Afterwards the floor was cleared of benches and many of them paid to stay behind and jive to a guitar and saxophone. The number of conventional couples dancing was few; most of the men were happy to dance by themselves, with a wealth of inspired improvisation.

CAPRICORN AFRICA SOCIETY

The meeting was in a trim brightly furnished drawing-room to hear and discuss the aims of the Capricorn Africa Society. There had been an open meeting in a cinema which had been a flop through lack of attendance.

"The average European miner is not interested in that sort of thing; they are here to make money quickly and then clear out."

Most of those present were friends who had been collected by telephone or similar methods. We were given handbooks with the Society's crest, a zebra (it does not matter what colour the skin is; where the bullet penetrates, the animal as a whole is just as surely wounded).

A member of the Society gave us a talk.

"The Society was formed in 1949 but not opened to public membership till 1954. Its aims are to further a working system of race relations and create, in Central and East Africa, states based on partnership between the races and no discrimination on account of colour: a policy very different from that of the Union of South Africa. We have formed Citizenship Committees in each of the territories of the Federation to work out ways of putting these aims into practice, especially as regards common citizenship. Africans are strongly represented on all of them. Their findings are to be combined in a charter suitable for enactment by the Federal Parliament.

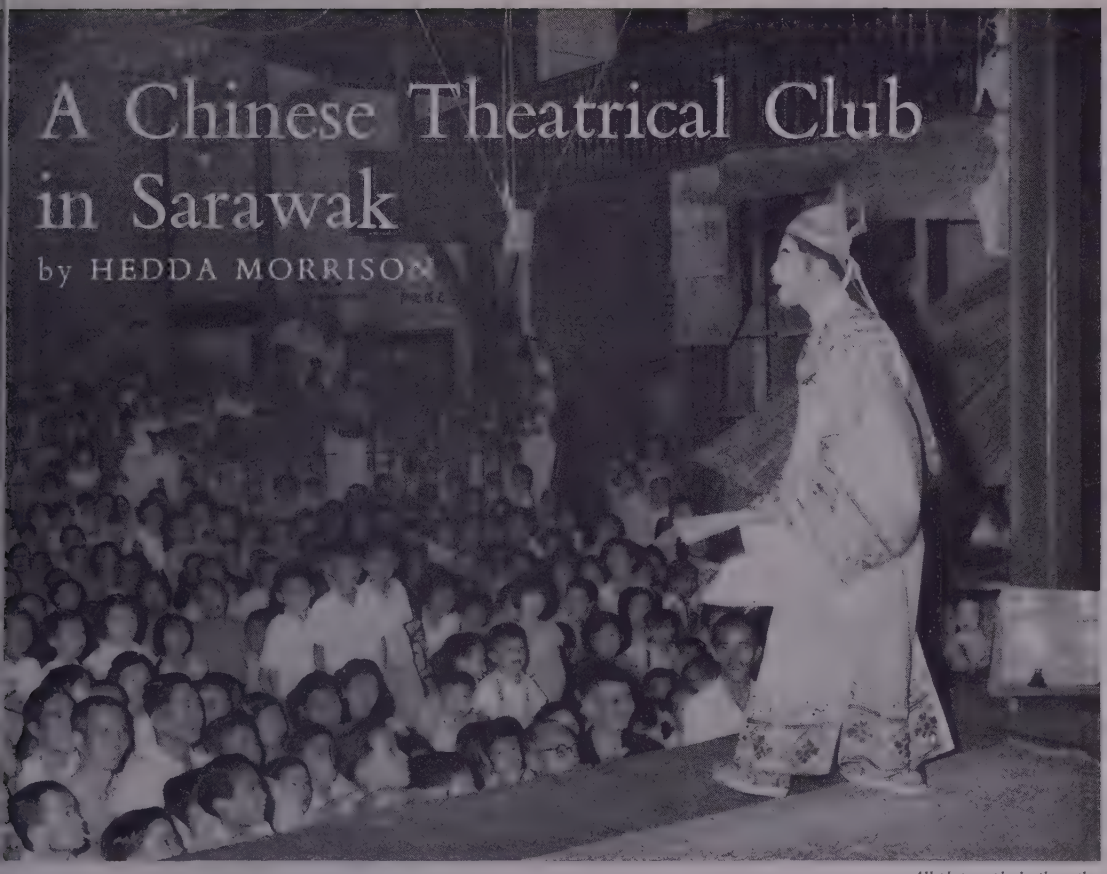
"Our basic intention is to fill in the missing rungs on the ladder between present-day African and European status through education with accompanying increase in political and economic power.

"You will want to know what part the mines can play in all this. Economically they have an enormous contribution to make. A great step in the right direction was taken when R.S.T. offered £3,000,000 to the Federal Government for general African development. The relative political power of the mine-workers is, of course, small; but your individual attitude to the problem of race relations can count for a great deal."

The questions asked over coffee showed an awakening—though still largely dormant—interest in what is perhaps, to the outside world, the most important aspect of life on the Copperbelt. The organizers of the meeting must have realized that the Capricorn Africa Society will have no easy task in overcoming the indifference that prevails among the European mining staff to a problem which, as yet, touches them personally so little; since everyday cooperation between Europeans and Africans, away from the mine-face and the drill, is practically non-existent, while the gap separating the highest rung of the ladder which the African can reach as a miner and the lowest rung on which the European stands is still so wide.

A Chinese Theatrical Club in Sarawak

by HEDDA MORRISON



All photographs by the author

(Above) *A Chinese play being performed by the Fukien Dramatic Association of Kuching. The lover, a rich pawnbroker, tells the audience how he won the heart of a beautiful young married woman*

Many millions of Chinese have emigrated to South-East Asia during the past century. Chinese mercantile contacts are much older, but large-scale settlement did not begin until the European powers encouraged the movement of Chinese labour to their colonies. Chinese customs are carefully preserved by the emigrants, among whom, as this article shows, the Chinese theatre flourishes

For centuries past their traditional theatre has been an important cultural and educational influence among Chinese of all classes. The drama never became so famous in the outside world, nor was it regarded in China as so great an art as painting or poetry. It had its roots in ancestor-worship and the songs and dances performed after victories in ancient times. Today the names of the playwrights are mostly forgotten but the plays live on in the affections of the people as a valued inheritance. The plays are mostly historical: ancient ceremonies, customs and events are kept alive in them. The public is familiar with all the stylized gestures used in the theatre and takes a critical interest in the way the players perform.

This interest is not confined to any one section of a community but is shared by all classes and ages. One may meet simple, illiterate people who know whole plays by heart. Even puppet-shows in the streets, the Chinese equivalent of Punch and Judy, provide classical dramas with their tiny figures. The Chinese shadow-plays are also in the mould of classical drama.

With such a well-informed public it is natural that the standard of acting should be high and it is no easy matter for an actor to achieve real distinction. He must not only be a good actor but a good singer and acrobat as well, for Chinese plays are a mixture of opera, drama and ballet. Another feature of the theatre is the interest taken by amateurs and there are many amateur dramatic clubs.

(Above) *The amorous pawnbroker gives the unfaithful wife a deadly snake in a small suitcase, to poison her husband. The wife is actually played by a man.* (Below) *At the side of the stage the orchestra, with 'fiddles', drums and gongs, produces lively music, accentuating and underlining the players' actions*

The stage is set in the open air opposite the temple entrance, with a grey-tiled roof above it ; the audience stands in the street The trial of the young wife for her husband's murder is in progress. She kneels, in white for mourning, with her mother-in-law, who accuses her, before the bearded magistrate

(Above) *Chinese actors often wear very beautiful and elaborate silk costumes which contrast with the comparative lack of stage properties in their plays. The club has saved up and bought costly robes from Singapore, though none of the members are rich men. Some of the costumes cost as much as £65 each. The actor drinking tea is an emperor; the other two are generals.* (Left) *Offstage: a last-minute rehearsal of gestures. All the movements used in Chinese plays are symbolic and have traditional associations; the audiences are familiar with and critical of them*

(Above) *The actors are their own make-up artists. The type of make-up used frequently symbolizes the character being portrayed. A red face marks an honourable or sacred person; a white face signifies a treacherous, cunning but dignified person; a villain will have a white patch on his nose; and so forth.* (Right) *Mr Chun Yi Sun, a tailor from Sibu, pays special visits to Kuching to take part in the plays; his services as an experienced female impersonator are in great demand. He is seen here preparing for the role of the unfaithful wife in "The Green Bamboo Snake"*

(Left) *Most of the members of the Fukien Dramatic Association live in Padungen, a suburb of Kuching. Some work as shop assistants; others, employed in a soap factory, are seen preparing wrapping labels. They are being helped by another member of the club who does not work there but has dropped in to lend a hand. All wear just a singlet and shorts in the tropical heat.* (Below) *At the Association's premises the members take gymnastic training, which is of great importance since many of the plays call for intricate acrobatic feats. The actors must be prepared to do anything from fencing to turning back-somersaults*

The Chinese are very adaptable and quickly accustom themselves to life in a strange country and a new environment, but at the same time they are intensely proud of their cultural inheritance and their theatre plays an important part in its preservation. It is not surprising, therefore, to find many dramatic clubs among the communities of southern Chinese who have emigrated from their homeland and settled all over South-East Asia. Recently I had the good fortune to watch a play performed by the Fukien Dramatic Association in Kuching, the capital of Sarawak. The members of the society meet almost every night in the suburb of Padungen for training and rehearsals. The club premises are on the ground floor of a shop. During the days of traditional temple festivals the members perform nightly according to ancient custom on stages attached to the various temples of the town. A few benches are set up for some of the onlookers, the rest stand; there is no charge for admission which is open to everyone. The only object of the members is to work together to maintain the culture and the traditions of their race. The oldest of them is a tiny, wizened grey-haired man who in his time was a famous amateur actor in China. It is he who is the chief producer. In days gone by the roles of women in the Chinese drama were always played by male impersonators. This custom was beginning to change in China about twenty years ago and in Kuching there are now quite a few young girls who take part in performances although the principal female roles are still played by men.

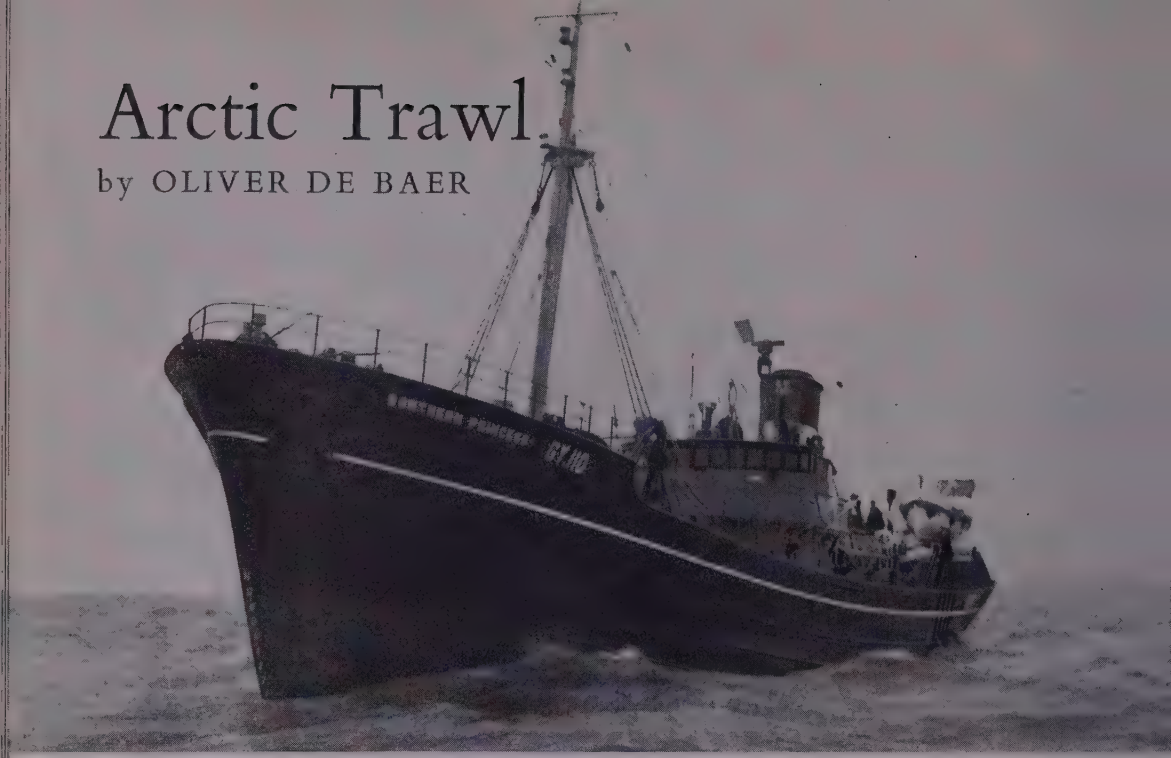
Ancient religious observances are not forgotten: members of the dramatic club often burn incense as these two girls are doing to obtain the blessing of the patron deity of actors

On the evening of the show I went to the temple just before darkness fell, at about 6.30 p.m. The dressing-room was tiny and brightly illuminated and rather crowded. This, the noise and the heat made the back of the stage a torrid place, but everyone was cheerful. There was no hurry or tension or display of artistic temperament. There were last-minute rehearsals, repairs to costumes, the adjusting of a microphone, all done by the actors themselves. Then the orchestra sitting on one side of the open stage started to play as loudly as possible to attract the public, although the theatre was already packed.

The play was a thriller called "The Green Bamboo Snake", a well-known popular story. An unfaithful wife decides to murder her elderly husband with the aid of her handsome young lover, a rich pawnshop-owner. He provides the erring wife with a deadly snake which she slips into her husband's mouth as he sleeps, unfortunately with his mouth open, in a drunken stupor, the wife having first attentively plied him with liquor. This monstrous act is accidentally witnessed by a thief. The dead man's mother becomes suspicious and brings the widow before a magistrate. The case is about to be dismissed for want of evidence when the thief makes a belated appearance and exposes the guilty couple, who are summarily punished. It is not a great drama, but it is great fun for everyone, actors and spectators alike.

Arctic Trawl

by OLIVER DE BAER



courtesy of Northern Trawlers Ltd

The Northern Princess: *such a new trawler will cost £200,000 compared with £30,000 in 1939*

Britain's long-distance fishing fleet, which supplies so important a part of our food, is by far the largest in the world, totalling 270 trawlers with an insured value of £23,000,000. Though entirely unsubsidized, the industry has kept the price of fish stable despite the rise in operating costs: a remarkable achievement, due largely to the men whose working life the author shared

Almost every day of the year, and year in, year out, some ten trawlers set out from the twin ports of Grimsby and Hull for the Barents Sea fishing-grounds. Three weeks later they return to harbour with their cargoes of fish, unload, refuel, and after two days ashore the men are back aboard and the ships set sail again.

Such are the bare facts about one of Britain's most important industries, and one vital to the whole country: an unsubsidized, privately owned and thriving industry with many millions invested in it. In order to learn a little more about it and about the men who make a living by it, I boarded the trawler *Northern Princess* in Grimsby Harbour and accompanied the crew to the fishing-grounds.

Northern Princess was typical of the class of ships which operate in Arctic waters, being about 180 feet long, with a beam of 30 feet, displacing 600 tons and with a draught of 17 feet in the stern in order to achieve better purchase for towing the heavy trawl. Her appearance was businesslike, with no unnecessary paint or scrubbing, as was that of the crew of twenty men who boarded her on the morning of her departure. With no fuss, almost unnoticed, *Northern Princess* cast off into the fast-flowing Humber tideway and reached the open sea. A course was set and everyone settled down for the four-day trip to the grounds as we plodded northwards at a shade over eleven knots.

During the outward journey life was fairly restful, and regular watches were kept as the men were employed on getting the nets ready on the foredeck. While things were still leisured, I took the opportunity of asking the skipper—a young man of thirty-five who had reached his position when he was twenty-eight—some general questions about the industry. One of the first things that I had noticed was the scarcity of men in the crew who were in their early twenties, and I asked if there were any difficulties in recruiting labour.

"What do you think?" was the pessimistic reply. "Most of the men in this ship are married, and they see their families for about

All photographs by Oliver de Bac

A Hull trawler at work during a lull between gales. The thin mist visible over the surface of the water is 'black frost'. At the time when this photograph was taken—late March—black frost is rarely a serious danger; in the winter months, however, it takes the form of a thick fog and trawlers often have to turn and run before it, as it can freeze onto the rigging faster than the crew can chip it off, and it has been known to capsize ships. The trawler displaces about 600 tons

The skipper of Northern Princess, *Mr J. Nunn, on the bridge. He is looking at the depth-sounder, which can also indicate the presence of marine life beneath the ship. To the right of the picture is the chart- and radar-room. It should be remembered that the depth-sounder cannot find fish, nor can it tell whether what is beneath the ship is in fact fish: nothing can replace the skill and experience of the skipper. The depth-sounder is also used for navigation, particularly for following the sinuous contours of the continental shelf*

When the 500-600 fathoms of cable have been winched in, the air-bladders inside the fish expand, causing the catch in the long 'sock' at the end of the net to rise to the surface. It is then emptied by stages, a ton or so at a time. Here a catch of about two such 'bags' is shown being manoeuvred alongside

The climax to each trawl is 'slipping the cod-line', shown above. The bosun is under the pear-shaped bag of fish—which weighs about a ton—and is loosening the knot. He will next stand clear and with one tug will release the fish onto the deck. The opening in the net is then closed with another 'cod-end knot' and the net cast overboard before gutting begins

Gutting in progress on the frozen foredeck during trawling. The fish are gutted and thrown into the washer—also shown in the picture opposite—after which they pass down the chute into the ice-rooms. The man nearest the washer is the Third Hand or bosun. The others are deck-hands. The whole ship's company except the skipper join in this operation, which may keep them on the windswept deck for several hours at a time

After travelling down the chute, the fish are stored on ice—often they are still twitching when they reach the ice-room. Here they are sorted by size, the smaller fish being packed less neatly than the larger ones, which are shown being stored in rows by the mate. Two men are more or less permanently employed on this work: although they are sheltered from the wind the advantage is largely offset by the intense cold which penetrates sea-boots and is particularly hard on the feet

A comparatively warm place to work is the liver-room in the extreme stern, where two members of the crew take turns at duty. The livers reach the steam-heated cauldrons untouched by hand, for the men wear rubber gloves for gutting. Crude cod-liver oil is produced in the ship; the sailors often give this to their children as it is, but the oil which is bought in chemists' shops has been refined on shore. The money from the sale of the oil is divided among the crew and usually makes a bonus of about £5 for a deck-hand on an average trip

Heading south once more, with the ship's holds full, the crew are kept busy repairing the nets and preparing for the next trip. Normally at least one net will have been worn out. Within a few minutes of docking the crew will be ashore and heading for home: the only work which they have to do during the short turn-round period of perhaps two days in Grimsby before the next voyage is the unloading, which is done at night

two days in the month. For the rest of the time they are cooped up on board, working the clock round when we are fishing, and in very uncomfortable conditions, as you shall see. This ship is modern—built in 1949—and the accommodation is good (there are even baths). But it isn't much of a life, and only tradition keeps the men at it. The ones on shore are far better off."

"I always heard that the wages were so good," I said.

"Well, so they are, but not considering the life that the men lead. Of course, a skipper gets paid very well, and both the mate and I pay surtax; but for anyone else they are only fair. And look at the disadvantages: for instance, if a man wants a holiday he must take a trip off, and he is not paid during that time. If he wants a pension when he is too old for the job he must take out life insurance—and 'too old' means fifty. A man cannot work after that, the life is too hard, and fishing hardly fits him for work ashore, does it?"

He then explained the complicated system of payment. "With the exception of the mate and myself," he went on, "everybody gets a basic wage from the company—about £6 per week for a deck-hand—and a percentage of the value of the catch. For each thousand pounds' worth of fish brought in, a deck-hand gets £6, the Chief Engineer £9, and the bosun £12. An average catch is worth £6000, so a deck-hand would get another £36 for a trip; in addition he would get another £5 for the liver oil which we process on board. However, out of this he must pay for all his gear, which gets worn out at a phenomenal rate."

"And yourself?"

"The mate and I get no wage, but are paid a percentage of the profit on each trip. Expenses are usually about £3500, and I collect 10 per cent of the value of the catch above that; the mate gets 7½ per cent."

The influx of big money into the Arctic fishing industry has in no way reduced either the incentives offered to all aboard or the very personal interest which each member of the crew has in success; nor has it really reduced the economic hazards. From the moment that he sets sail, the skipper is as much the master of his ship as if it were his own property. It is he and he alone who decides which of the grounds he will visit and how long he will stay there. His decision is based on the reports of other ships which he hears as he goes along, so that he does not usually know where he will start operating until he has been at sea for about three days. Once fishing has started, however, he is virtually committed to land his catch within twenty days, as the fish caught will otherwise be too old to achieve a ready sale with merchants who have kept a careful check of the number of days that each ship has been out of port. Even then, an over-large catch by several ships can lead to a glut, especially in summer when housewives buy less fish, and a large part of a catch may have to be sold for fish-meal for fertilizers at a third of its usual price.

After an exceptionally calm journey, the ship stopped about twenty miles from the Norwegian coast to fish in the Malangen grounds. All around us were other trawlers, mostly British or German. The skipper drew me aside to the radar. On the screen an irregular line of about twenty dots showed, each of which denoted a trawler.

"Now I am going to show you something interesting," he said, pulling over a chart and pointing to a line marked "200 fathoms". "Do you see that the line of those ships corresponds exactly with this section of the 200-fathom line? That is where the fish usually are, on the edge of the continental shelf, where the water is neither too deep nor too shallow. We have to follow that line very carefully, using the depth-sounder, with which we can locate the continental shelf exactly."

A bell rang out, bringing the crew onto the foredeck. A winch clanked and was soon paying out 600 fathoms of cable at the end of which was the net. The operator sang out the amount of cable which had gone out; then the ship steadied down to its trawling speed of four knots.

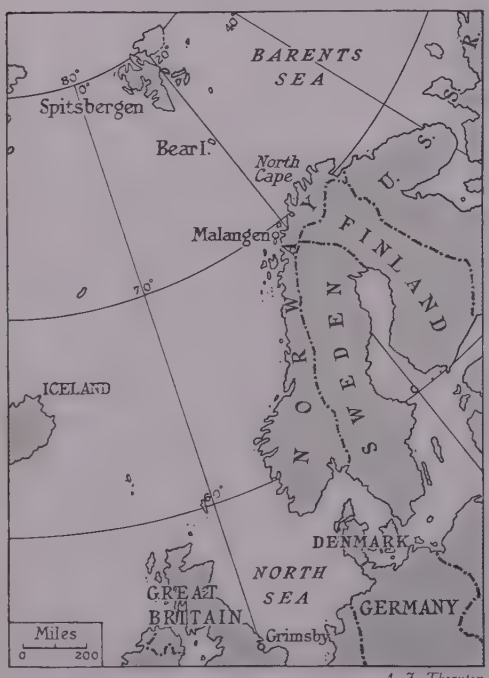
"This thing", said the skipper, pointing at the echo-sounder, "tells us how much water we have under our keel, and with it we can follow a given depth-line, but it also indicates the presence of marine life." I watched the winking green line on the screen. "Where it thickens suddenly you have got something—not necessarily fish, it may be plankton; and you cannot be sure that it will go into the net, which is trailing about half a mile astern, but it is an indication. However, don't believe that nonsense you hear about modern fish-finding by wireless—the only time that you can be sure that you have found them is when they are in the bag. Even other skippers' reports only tell you where there are fish, and not where the fish are."

Experiments are going on with 'mid-water' trawling, but at present most trawling is done

with the net touching the bottom, and with the upper lip of the mouth of the net about five feet above it. The mouth is held open by wooden 'doors', a kind of fin, which drag along the bottom and pull eccentrically; the mouth is about sixty feet wide, tapering into a long sock-like end which is reeved shut with a quick release 'cod-end knot'.

After two hours' trawling, the winch was again clanking as the net was brought up. Slowly and deliberately the end of the net rose to the surface, now full of fish, and looking like some ungainly monster floating in the water. In an intricate and well-drilled operation a dripping load of about a ton of fish was hoisted aboard to dangle, pear-shaped, above the deck. The bosun went underneath and undid a rope; then he stood clear and with one powerful tug released the fish, which fell in a shiny heap into compartments on the deck. The knot was retied and the net cast over the side. As there had been more than one 'bag'—the amount that can be hoisted aboard at one time—the ship went astern with the net trailing in order to wash the fish into the end, and the process was repeated until the net could be cast off again and trawling begin once more.

As soon as the net was clear of the ship, the men set to work gutting. Standing knee-deep in the fish, they worked quickly, throwing the fish over their shoulders into a washer which stood on the deck and which automatically passed it down to the storage-rooms. The catch was mostly cod and haddock, with small quantities of bream, catfish, skate and plaice mixed in. The guts were cast on the deck, later to be washed away, but the livers of cod and haddock were carefully saved in baskets, later to be blown by steam to the very after part of the ship. There, in the liver-room, they were processed in large boilers in order to remove the oil which, after further refining on shore, would eventually find its way into chemists' shops as cod-liver oil, the sale of which was a substantial contribution to the men's wages.



A. J. Thornton

Below the deck where the gutting was in progress, two men were continuously at work storing the fish. Over a hundred tons of ice had been brought from Grimsby for the purpose. The fish dropped down a chute and were immediately sorted by size and variety. The smaller ones were packed wholesale in layers with ice, and protected from crushing by wooden boards, whilst the bigger ones were carefully and neatly placed in rows.

After twelve hours' fishing, only about five tons had been brought aboard. "About this time of year the fish just vanish from Malangen," the skipper explained, and soon he had given the order to bring in the trawl and make fast. The steady thudding of the screw quickened as he rang for Full Ahead. "We are going to try Bear Island."

The few days' fair weather that we had enjoyed were, I learned, a rather unusual experience. They did not last. As we steamed north, the glass dropped with disconcerting suddenness, and by the time that Bear Island showed on the radar it was blowing a full gale. Fishing was impossible, so we lay to until the gale had moderated slightly. It was then that I saw that the life of a trawlerman has lost little of its harshness, in spite of the baths, depth-sounders and radar. If the wind had moderated, it was nevertheless still very strong, and to compensate for its reduced force it had veered to the north-east, so that it was now very cold, so cold that it froze the net as soon as it came out of the sea, the fish were rigid within a few moments of hitting the deck and the rigging grew thick with the ice which formed around it. So long as there was work to be done, there were men on deck to do it, working eighteen, twenty and even twenty-four hours a day, with only cat-naps for rest, standing on the heaving platform in the stinging, spray-laden wind and through the frequent snowstorms, heaving at

the net, working the winch or gutting the fish. The motion of a trawler in a gale is such that it is no uncommon occurrence for men who have been at sea all their lives to be seasick, but the work goes on, unglamorous and seemingly unending.

From time to time, little patches of heavy vapour could be seen trailing along over the water, sometimes coming up to the level of the deck. "That", I was told, "is what we call black frost. If it gets thick we have to turn about and run away from it, as it makes ice form on the rigging so fast that it cannot be chipped off fast enough, and the ship could capsize and founder. There isn't enough to worry about at present—it's nearly April, don't forget!"

"What are the other dangers that you have to face?" I asked.

"Well, I think about a total of one per cent of trawlers are lost each year, and something like a hundred lives—not only by the loss of a ship. Men get trapped in places, things fall on them, warps part, they get washed overboard—they do not live long in that water. Ships usually founder because of a lee shore, and the trouble sometimes comes from a skipper's over-confidence in his familiarity with the grounds. About five ships were lost last year. A ship is worth some £130,000—and don't forget, all the money to pay for it has to come out of the end of the net."

"Is it very expensive to keep one of these ships at sea?"

"I suppose that £300 a day would cover absolutely everything, insurance, pay, depreciation, replacement of gear (did you realize, for instance, that we have to buy 1500 fathoms of three-inch cable every eight months?), hire of the wireless equipment . . . Yes, we have £25,000 worth of that, including two direction-finders, two transmitters, three receivers, two radar sets and three echo-sounders. And even with all that, finding the fish is still largely a matter of luck and experience."

A big trawler with a hammer and sickle loomed up through the storm. "We don't have any competition from those people. The worst are the Germans. Do you know that if it looks as though a Grimsby ship is going to be the only one landing on a given day, the merchants will wire for a German ship to come in and land in order to keep the price down? The Germans go in for quantity where we go in for quality, but it means that where we might have got ten shillings a stone we now only get eight. Mean, isn't it? And we can't land in Germany because we would not be paid for quality there."

The absence of men in their early twenties that I had already noticed was symptomatic of the fact that, in spite of its present prosperity, the deep-sea trawling industry has its troubles. Before the war, Grimsby had been a distressed area, and men had had to compete for jobs; after the war, with fishing-grounds left fallow for six years, large catches gave good returns, but now, as the fish grow ever more scarce, and with the pay not so very much better than that of a shore job, most of the men admit that if they could they would leave the sea. Grimsby has already been spotted as a good area for labour by four national companies, and soon titanium, tyres, rayon and fertilizers will be competing with the traditional fish for the labour. Everybody was unanimous in saying that their main criticism was not of the pay, nor even of the time spent at sea, but rather of the lack of superannuation and paid leave. It was generally felt that the industry, having used the men, should look after its own when it could use them no longer. Industry's reply to this is that the wages are good enough to pay for insurance, that the men are kept free, and that any increase in welfare is bound to be reflected in an increase in prices, and therefore by a possible decrease in sales. The management of the companies concerned are proud of their unsubsidized record—which contrasts so favourably with the situation at present prevailing with many companies operating in the North Sea—and are anxious to maintain it. An easier labour situation has so far helped Grimsby's German rivals, but even there the same problem is beginning to make itself felt.

For ten days, with occasional breaks for the bad weather, the work went on. Clothes became damp and could not be dried as even below decks the cold made itself felt. Every two hours the net was hauled in, emptied, the fish gutted, washed and stored, another load arrived and the process was repeated. Slowly the storage rooms filled until, quite unexpectedly, the order came for the nets to be stowed. Once more, the beat of the screw quickened as a course was set, this time to the south. Following winds favoured *Northern Princess*, and five days later we passed Flamborough Head and entered the Humber. With the same lack of ceremony with which we had left we docked in Grimsby, and everybody went ashore. For me it was the end, but I left Grimsby knowing that, only two short days later, *Northern Princess* would be at sea once more and heading for the Arctic.

Local Variety in British Farm Carts and Waggons

by G. E. FUSSELL

Here is a subject of geographical concern (exemplifying "the interaction between man in society and so much of his environment as varies locally") of which insufficient is known. The Keeper of the Museum of English Rural Life at Reading University will be interested to receive information about, and photographs of, surviving examples of regional types of farm carts and waggons

We were chatting outside the village Post Office while we waited to be served from the fishmonger's travelling shop, when the farmer said: "There's something you don't see very often nowadays!"

It was a farm cart with a horse in the shafts and the wheels muddied to the axles. I did not say I had seen three pair-horse waggons bringing home the harvest last autumn in a neighbouring village. There are still, of course, a good many horses working on farms, but the carts and waggons they haul are giving place to lorries hauled by tractors and motor-trucks. (Carts are two-wheeled, waggons four-wheeled vehicles.) Many of the old carts and waggons are to be found in out-of-the-way farmyards; the waggons in particular are things of great beauty even when they are cast aside. They are well worth looking for, and indeed photographing for record, before they finally fall to pieces and vanish for ever.

The classic of the horse cart and waggon, *The Wheelwright's Shop*, by George Sturt (who wrote as George Bourne) is the story of his father's and his own work as a wheelwright and waggon-builder at Farnham, Surrey, during the latter half of the 19th century. By then the carts and waggons, once peculiar to particular districts, were being standardized and made for the whole country in factories, rather than in the villages for local use.

Many of these vehicles, despite all the ingenuity that had been put into improving them during the intervening centuries, were not very different in outline from those used in the Middle Ages. The picture of carting the harvest in the Luttrell Psalter (*c.* 1340) shows a hay cart being hauled home by three horses in tandem. This cart has a falling back to form a longer base for loading and a slight projection over the thill-horse's back. The wheels are fitted with what looks like a spudded tyre to give adhesion, and must have been all of six feet high. It was helped over the rough ground by three men shoving behind. This type of cart was used with little change throughout the next six centuries. The body and sides were more usually solid in later types, but hay ladders were used on Hampshire carts in the early 19th century. These were a common way of extending the loading base; but it was quite possible to overdo the loading and a long controversy raged as to whether it was best to use three horses in one harvest cart to haul a big load, or to have three separate carts, one for each horse, with a comparatively light load. A number of carts of the early 19th century looked almost the same as that in the Luttrell Psalter. One of these, for example, was Lord John Somerville's patent cart, which differed only in that it had a peculiar braking device that applied to both sides of the wheels, and was fitted with a gadget that allowed the centre of gravity to be altered by tilting the cart when going down hill so as to make the horses' job easier.

By the time of Henry VIII Sir Anthony Fitzherbert, the writer of our first printed farming textbook, *The Boke of Husbandrie*, thought it necessary for a good farmer to have both a waggon and a cart, or at least the necessary parts from which they could be put together. He thought iron-tyred wheels were best for waggons except on marshy ground where wide wooden soles were most satisfactory. On ordinary ground iron tyres made for ease of draught. Linch-pins or axle-pins should also be made of iron or of good tough hardwood, and the body should be made of oak. The cart must be fitted with a cart ladder behind to carry hay or sheaves of corn, but, though he remarks on the great variety of ploughs used, he does not say anything about the local differences of carts and waggons. I am certain that there were such differences then just as there were when George Sturt was writing, and as there were in Restoration England.

The Mustograp

Carting the harvest: a Somerset waggon in use in recent years, with horses in tandem. Earlier Somerset waggons, though considered light, often needed six horses harnessed in pairs to haul them

John Worlidge, a century and a quarter after Fitzherbert, thought the larger a wheel was the lighter the draught would be, and the more easily it would pass over the inequalities of the unmade roads of those days. The only reason why the forewheels of a waggon were smaller was for convenience in turning. At the same time he recognized that the higher a cart or waggon was, the more likely it would be to overturn, so that the body of the cart should be put low. The spokes of the wheels, too, must be concave or sloping inwards towards the axle to prevent accidental breakage on rough ground.

Everybody who owned a cart or a waggon was very concerned about easing the horse's burden. William Ellis, an 18th-century farmer of Little Gaddesden, Hertfordshire, the author of a great many books about his business, went so far as to lay down no less than nine good reasons for putting the heaviest part of the load at the back of a waggon. He liked a long bed to the waggon as well, because he thought it gave stability; and he had some theories, not very clearly expressed, about the line of draught from the horse to the wheels, but I should not dare to express any opinion about these.

When it came to heavy haulage on the roads by long-distance carriers, the waggons used were cumbersome in the extreme. All sorts of laws were passed regulating the width of the wheels because it was thought that a wide tyre would not damage the unmade tracks so much as narrow ones, and moreover they would be lighter to haul. These carrier's waggons were vast, massive vehicles, very like the Prairie Schooners used on the trail westward by Americans in the 19th century, or by the Voortrekkers in South Africa.

The earliest writers did not think it necessary to mention local differences between designs of carts and waggons but when the old Board of Agriculture, which functioned from 1792 to 1821, made its survey of farming, county by county, at the end of the 18th century these differences had become quite marked. Counties were very proud of themselves then and some confidently claimed special breeds of livestock and special types of implements as their own, when they were, in fact, very little different from those of

British Museum

(Above) *A harvest cart, depicted in the Luttrell Psalter* (c. *1340*), *has a falling back supported by ropes to extend the loading base, and a permanent extension over the thill-horse. The driver stands on the shaft.* (Below) *Carrying hay, Bedford Park, 1893-4, showing detachable hay ladders in use*

Picture Post Library

Picture Post Library

(Above) *An engraving by Bewick* (c. *1797*) *of a dung cart, presumably a Northumberland type, being loaded.* (Below) *A modern scene : unloading manure in Berkshire. On many farms this heavy work is now done mechanically : loading is by a tractor-operated fork or grab into an automatic muck-spreader*

The Mustograph Agency

By courtesy of the University of Reading Museum of English Rural Life

(Above) *A Cotswold waggon, with narrow wheels and rather high sides. It is "hoop-raved" (i.e. the rails extending the sides are curved). The high front wheels meant that it needed a lot of room to turn in.* (Below) *The larger waggons of the neighbouring county of Herefordshire had broad wheels*

By courtesy of the Hereford City Library, Museum, Art Gallery and Old House

By courtesy of the University of Reading Museum of English Rural Life

(Above) *Another local variation: a Berkshire waggon, once the property of a farmer famous in that county.* (Below) *A Suffolk waggon: "the beam on each side was not continued from one end of the waggon to the other, but was joined in the middle to make more room for the forewheels in turning"*

By courtesy of the University of Reading Museum of English Rural Life

others. For example the Dorsetshire waggon was reported to be a light good sort of vehicle, which the people regarded as essentially a Dorset product. It was, however, very similar to the Berkshire waggon, a highly approved sort, and indeed to those used in Bedfordshire and many other places. At Fifehead Neville, the wheel ruts, an important consideration to the waggon-builder, as George Sturt pointed out, were five foot six inches asunder. As the centuries passed these had become so indurated that all new waggons must be made to fit the old ruts. If they were not made to this measure they could not travel on the local roads.

The Suffolk waggon was so made that the beam on each side was not continued from one end of the waggon to the other, as was usual, but was joined in the middle so as to make more room for the forewheels in turning.

In Hampshire a substantial cart was used, and an ingenious device enabled two of their patent carts to be married to make a four-wheeled waggon. The Bedfordshire "dung pot" was a primitive sort of tipping cart, the shafts being fixed to the axle. It was in fairly general use about the countryside. The Scotch cart had a frame to lay over the body, extending on all sides, to give a wider loading platform for the cartage of hay and corn.

Even in neighbouring counties like Gloucester and Hereford there were great differences. The Gloucester waggons had narrow wheels; the Hereford six-inch-wide tyres. The former carried two to three tons; the latter three-and-a-half. The former was hauled by four or five horses; the latter by six.

Even within the county of Yorkshire there were differences. It was so large and its physical configuration so varied that the local conventional designs had been justified by long experience. Two- or three-horse carts were used in the hilly parts in the north of the Vale of York. In the south waggons were generally used in addition to carts of the sort used in the north, and there was a light one-horse cart as well. In the western moorlands they mainly used one-horse carts of various designs and scarcely any waggons; in the eastern moorlands small waggons with low wheels were drawn by a yoke of oxen with a pair of horses before them. Wheels in this county were rarely more than three inches wide.

In some parts of Yorkshire and elsewhere in the North of England and in Wales the gradients were so steep that wheels could not be made to turn, so the hay was often brought home on sledges that slid down the slopes; while heavy goods were carried throughout the North and in the hills of Devon and Cornwall by pack animals until a comparatively recent date. Here and there can still be found the old pack-horse bridges over the streams and in the neighbourhood of Halifax the paved ways of eighteen inches or so wide along which the pack-animals went are still to be seen.

The 19th century became scientific about cartage as about so many other things, and the Royal Agricultural Society, whose motto was "Practice with Science", held trials of waggons and carts in 1865, 1869 and 1874.

There were still many local wheelwright's shops at this time, like the Sturts' at Farnham, Surrey, but a great many carts and waggons were being made by urban manufacturers. In the trial of 1865, which appears to have been judged solely by eye, a Devonshire firm, T. Milford and Son, got special mention for producing a range of carts and waggons very suitable for hilly country. The Beverley Iron and Waggon Company, Hayes and Son, Woods and Cocksedge, Ball and Son, A. and T. Fry and Robert Puckering and Co. also competed. Other firms entered the 1869 competition, including W. Crosskill and Sons and Thomas Corbett, and a definite trial was held. The vehicles were loaded with pig iron and tested with a dynamometer; the details of construction were carefully examined, as well as the quality of the material used.

The use of pig iron as a load was not really very satisfactory from a farmer's point of view. Pig iron has weight but it has not the bulk and instability of many of the loads a farmer is obliged to carry, nor was it really an adequate test to make the vehicle travel a certain distance along a road. The 1874 trials were more elaborate. The vehicles were loaded with roots, bags of maize or straw as was appropriate, and were required to travel along turnpike roads with a rising gradient of 1 in 430, and a similar distance of 200 yards through an oat-field, the draught being measured by Easton and Anderson's new horse-dynamometer. The results were a good guide to purchasers, but I feel quite sure that many of them went on buying from the local men as their fathers had done before them, whenever they needed to buy a new cart or waggon. This event must have been rare enough. The wheelwrights built for endurance and waggons lasted a century or more if cared for. That is why they can still be found on farms today when they have in general been discarded in favour of the power-drawn trailer or power-driven lorry. They are well worth seeking out.